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Farm Department.

Conducted by J. H. Brown, who lives on his farm at Climax, Mich., which is conducted as the Michigan Farmer Experiment Farm. All correspondence for this department should be sent to Climax.

For the Michigan Farmer.

SOWING ASHES ON WHEAT GROUND.

I am a subscriber to The Michigan Farmer, and I want some information as to how to use hard wood-ashes, which have never been leached and kept "in the dry."

I want to sow the ashes on my wheat field. Which would be the proper way to drill them in, with the wheat, or sow broadcast, before or after sowing the wheat?

My idea was to use a phosphate drill and sow them the same as phosphate. How much ashes to the acre would be advisable? The field I propose to put the ashes on is high land, clay loam, sown to rye last fall and plowed under in June and July. There was a fair growth of rye.

If you can give me the required information through The Farmer I would be very glad, and perhaps others may be benefited.

Lapeer Co., Mich. DANIEL WEBSTER.
(Have never sowed any large quantity of wood ashes on our wheat ground. We should sow them broadcast, thickly or thinly, according to amount you have on hand, just before harrowing the seed bed the last time previous to sowing wheat.

If your drill has a fertilizer attachment, you can sow the ashes when seeding to wheat. If sown thickly, or to the full capacity of the fertilizer feed run, the application could hardly be any too heavy, if your soil needs potash.—Ed.)

For the Michigan Farmer.

CORN TIES ON DECK AGAIN.

Some time ago I became a reader of The Farmer, and so far am well pleased with it. I noticed some articles about "the tie that binds," and as you ask for hints, will tell you about the tie I bind (corn) with.

I use what is called the Killmer corn tie, it being the invention of a prominent farmer of this place. To make it, take a piece of straight-grained wood, pine preferred, about six inches long, one inch thick.

With a coarse rip-saw cut a slot in it two inches deep the wide way, then split crossways into inch pieces, cutting out a little piece on opposite corners next the slot. Then cut a string of binder twine about two feet long, tie a knot in one end, slip it in the slot and draw through to the knot.

Pass the stick around the bundle of stalks, slot end up, bring the slot twice around under the stick, draw tight, slip into the slot twice and the bundle is tied. Untie by pulling out the free end of the string. These ties can be made very quickly. A ball of twine will cut into 250 to 300 strings, and if saved will last two years, while the sticks will last almost a lifetime. Some will split, but on the whole they are a cheap and efficient corn tie.

Arenac Co., Mich. O. P. CANERA.
(These ties are more especially intended for binding corn stover and small bundles of fodder. Last winter

we gave several cuts and descriptions of ties used by some of our brother farmers, and as the season for their use is approaching, additional information will be appreciated.

For binding shocks of corn, we have used, for several years, one of the ties advertised in The Farmer. Binder twine is not heavy enough for our purpose in holding large corn shocks compactly together. The tie and twine we have now used for four seasons is in just as good condition for another season's use.

We formerly used marsh hay for this purpose, the material being wire grass or blue joint. Sometimes we used one or two limber stalks, taking pains to bend each stalk between the lower joints before using. Many times the shocks bound with stalk twine would go to pieces ere husking time came, and we hated to use such material.

Years ago weeds were plenty and largely used by many farmers, but weed twine has become scarce in recent years.—Ed.)

For the Michigan Farmer.

TRY A DRY EARTH CLOSET.

I see you have had experience with palls for earth closets. I am to change the location of the closet and am afraid that freezing the palls would make a great amount of trouble.

Have a vault now, with slanting back. We put in dirt, sawdust, chaff, etc., then shovel onto a stone boat.

If the palls are a success, I should think they could be placed on a wide boat, under the seats, and hauled out without having to load them on.

Please state the size and shape of palls, and whatever you can to help me just now. We want to do this work soon and hope to hear from you.

Ingham Co., Mich.
(We use heavy galvanized iron palls that hold nearly one-half bushel each. The sides flare out toward the top, and they have a heavy ball, also a side handle near the bottom.

We lift up the whole seat to insert the palls into position, and withdraw them when full. The floor and wall underneath the closet is tight, thus preventing any draft of cold air in wintry weather.

In "zero" weather we never have any trouble in emptying the palls. Coal ashes or road dust are sprinkled over the contents of the pail each time after using. No odor is noticed in the closet, during summer or winter.

To empty a pail we take it outside to the place where the contents are to be dumped. An old teakettle full of boiling water is used to pour a little on and around the sides of the pail, the pail being meanwhile tilted to one side so that the hot water will run down over the whole outer surface. It takes but a moment to thaw and loosen the contents from the sides and bottom of the pail. The pail is then turned over and the contents are entirely detached.

We wish the dry earth closet could come into general use. We know it would be appreciated by thousands of our readers.—Ed.)

For the Michigan Farmer.

GETTING RID OF STUMPS.

I want to know if you can give me any information concerning the following:

I have a farm with hemlock, pine, ash, elm and a few white and red oak stumps on same. I have heard that kerosene, or saltpeter put into stumps of this kind, by boring holes in them and filling the holes with one of the above ingredients, then plugging up the holes, leaving the stumps to stand for a year, that they can then all be burned up clean.

If this is correct can you tell me how much of the oil or saltpeter to use to each stump, and if you do not know about this matter, can you refer me to some one through your paper or otherwise who can give me the information?

I also want to know about alfalfa, the kind of soil it will grow on, amount to sow to the acre, time to sow it and the average yield, etc.

Saginaw Co., Mich. C. S. BLISS.

(We wish some of our "Northern" Farmer readers to answer friend Bliss' inquiry. We have seen the above ingredients used in a small way, but had no experience of our own. As to alfalfa, go slow. Try a small plot of ground, if you wish, but we advise you to try red clover. Alfalfa has generally been a failure in the experiments tried in this State.—Ed.)

For the Michigan Farmer.

WORK ON THE FARM.

Our wheat this year was the poorest yield we ever had. The Winter Fife was also a very poor quality. This ends our experience with this variety of wheat.

I think the poor yield can be attributed to two causes: First, rather late sowing on account of its being corn ground, and the corn blowing down by a hard storm in August, which hindered us very much, and second, by a hard rain and followed by a hard freeze when the ground was bare in January.

This last cause, I think, was the main reason for failure, because early sown summer fallow shared the same fate.

If no storm comes to blow down the corn this fall, we shall have our wheat sown by the 10th or 12th of September. We are now, Sept. 1st, cultivating and fitting the ground in good shape in the corn, going through and cutting out every weed and the June grass.

When we get through sowing not a single weed can be found in the corn-field that will ripen any seeds. It will be absolutely free from weeds and will bear inspection.

We will commence drilling in wheat about the 10th. We have purchased a one-horse wheat drill to use in the corn. This drill is one of the most complete we ever saw. It can be ad-

justed to fit any width row, wide or narrow places in the row, while the horse is walking. There are handles to it, but the rows of corn keep it just where it ought to be without any care on the part of the operator.

Our corn was drilled in with a grain drill, which did its work well. We have a splendid well-eared crop, but I have my doubts if drilling is the best way when you wish to sow to wheat. The ground cannot be prepared quite so well as if worked both ways.

This has been the worst summer for weeds I ever saw, and it has been a fight to keep the corn clean. The summer was so unfavorable for cultivation that we could not use the weeder, and for two weeks at a time we could not get in with a cultivator on account of wet weather. All this time the weeds were getting in their "best licks."

But the battle is won, with good corn and no weeds, provided the frost holds off. It is always safest to put in a "proviso" about this time of year. The worst objection I have to drilled corn is cutting it up. The weeds, if managed right, can be cared for with little trouble in cultivation.

Now, I believe it is wrong when writing for farm papers to wait until you get a good crop and then write it up. This is not my style. When I write I shall give the good with the bad, my mistakes and failures with the successes. This is honest, and there is no other way of being of any value to the readers as a correspondent.

The best farmers make mistakes and have failures. Then why not write them up with the good things?

My potato crop is almost an entire failure, and I will be one of the many that goes to make the price of potatoes high. Because it is the many failures that make the high price of any commodity.

We fitted up five acres of ground that had been cropped about seven years, and this is the first crop.

The drainage was imperfect, and it is covered with small depressions the same as any new ground. It has a hard clay bottom, and what water falls has to soak away and evaporate. We planted our potatoes in good shape and had an excellent stand, and I had just begun to feel like bragging on the fine prospects for a fine crop, when about the 6th of July there came one of those terrible rains, that don't seem to come from any particular direction, and just flooded everything.

Then a three days' rain set in, and it was two weeks before the water had entirely disappeared from our potato field. The result was, that the potato leaves wilted, dried up and fell off. On the higher ground it so stunted the vines that it made them an easy prey for the bugs, which came by the bushel.

I don't think there will be enough potatoes raised in Gratiot county to sup-

ply the demand until a new crop is raised.

Only a few weeks ago farmers were selling potatoes at five cents a bushel, feeding them and giving them away, any way to get rid of them. Now they are selling for 65 cents a bushel and hard to get good ones at that.

I just fed my last Rural New Yorker No. 2 potatoes to my cow about a week ago, and it was remarkable to see how well they were preserved. They had only sprouted twice and some of them seemed quite solid. The R. N. Y.'s are great keepers.

I. N. COWDREY.

Gratiot Co., Mich.

(Our experience with the Winter Five was similar to yours. It is one of the poorest wheats ever introduced into this State. We have used the one-horse wheat drill for sowing in standing corn, for several years, merely for sowing strips. In your latitude we think such a drill would pay almost any farmer who sows his corn ground to wheat.

Upon the whole, we are well pleased with our plan of drilling in field corn. We have a heavy crop of corn maturing, heavily eared, ground quite clean and in good condition for sowing to wheat. No wheat will be sown in the corn, however, as previously stated.

We commend what our friend says about recording failures in crop growing as well as successes. This has been our practice, and the recording helps others to see wherein the fault lies, as well as ourselves. But there are failures over which we have no control, especially climatic conditions, and from which, seemingly, no inferences may be drawn by way of warning to others similarly situated.—Ed.)

For the Michigan Farmer.

NOTES AND COMMENTS.

Some time ago a friend called our attention to sweet clover as a renovating plant. Since then we have had an opportunity to notice it in different places, and have been surprised to see how quickly it takes possession of a barren, worthless plot of ground.

In one instance it was found along the road which had been made by grading down a hill. At the side of the track there was at first nothing but clear sand, which did not seem fit to support any kind of vegetation. After a time an occasional stalk of sweet clover was to be seen, and after that the transformation was rapid. The ground is now covered with a luxuriant growth of the plant, and apparently with no other kind of vegetation.

Another example similar to this may be given. A hill was graded down, leaving it bare of surface soil. For years it remained in this condition, supporting no vegetation whatever. Now it has a rank covering of sweet clover.

The plant stands dry weather well, as is evident from its fresh, rank appearance when other vegetation has become parched and withered. It is said to be a good nitrogen gatherer, and considering the soil on which it grows the claim is easy of belief.

In the South considerable is claimed for it as a forage plant, but so far as our observation goes it is not readily eaten by stock in this latitude. Perhaps it is lacking in flavor or is in some other way less desirable than in warmer climates. But the value of the plant comes from supplying a rank growth upon soil good for no other purpose. It may be worth little as a food plant in itself, but it prepares the way for other vegetation by furnishing nitrogen and an abundance of humus, and otherwise fitting the soil for plants of a higher order.

It may be that sweet clover will not grow on the pine barrens of the State, but we have seen it growing under conditions apparently as hopeless as the sawdust of the northern plains. It certainly looks as though as much or more is to be expected from this plant as from the famous flat pea of a few years ago, from which so much was anticipated and so little realized. Anyhow, if we had a sand lot we would try it, at least. It might not grow, but we feel safe in saying that it will if anything possibly can.

Perhaps nothing has given the farmers in this part of the State more encouragement than the good crop of clover. For several seasons the crop has been nearly or quite a failure. The dry weather has played havoc with the seeding and insects have finished the work.

Clover seed was an important crop

with the farmers here at one time, but now the thresher has become nearly as rare as the old stage coach. But some good has come from this loss of clover. We found that we could get along quite well without it, though we did not like to. It brought other forage plants to our notice, and compelled us to make better use of those we already had.

When clover disappeared the insects which lived upon it did not long remain. Now that conditions are again favorable for its growth there seem to be few insects to do it much damage. We are glad to have clover again, and appreciate its value more than ever, but we will not again be so helpless if it fails us.

The custom of naming the farm is becoming common and is to be encouraged. Especially is this true of fruit and dairy farms or those which are known for some specialty. Many farmers now have printed stationery, which is a great convenience, and the outlay is small. The most convenient form we have seen was like the following:

J. S. —, Ionia, Michigan.

Ionia Township, Section 4.

A stranger should have little trouble in finding that farm. The section number may not be as important as the street number in a city, but there are many occasions when it might be used to good advantage besides in describing land in a deed.

In a recent number of The Farmer a correspondent calls attention to the prickly lettuce. We found three or four plants last year. How it came here is a mystery, as there is none for many miles around, so far as could be learned.

Perhaps the blame for carrying the seed may be laid to the birds, who are often accused of more than they really ought to answer for. It frequently grows among bushes or in other places where it escapes detection, and for this reason is not always easy to find. It does not look like a plant which would be hard to manage if taken in time, but once established it is a very pernicious weed.

Twenty-five or thirty years ago the small white daisy was not considered much of a pest by the farmers in this part of the State. It looked harmless and easily escaped notice.

There were some farmers who were suspicious of it and kept their fields clear of the weed, and now they have good reason to congratulate themselves. In some meadows the coarse, woody stalks have nearly taken possession, to the great detriment of the hay, which has sometimes been rendered unfit for market and of little value for home use. A single neglected plant will mature scores of seeds for another year. The daisy is easily kept in subjection when taken in time, but we have frequently had occasion to notice that when neglected it soon becomes a source of loss as well as annoyance.

So much has been said about this plant that there would seem to be no excuse for ignorance of its nature, yet we find it treated with indifference in places where it has not yet become common. Like the Canada thistle and mustard, it will make itself known in a few years. A day or two spent in pulling it at the start might easily keep it in check.

Oakland Co., Mich.

F. D. W.

(Both sweet clover and cowpeas are better known, and far more largely grown in the South than in this latitude. We had never tried either plant until this season, but now have about an acre of cowpeas that have made a thrifty growth.

The peas were sown somewhat late, and have just commenced to blow out. They completely cover the ground and, in places, are more than two feet high.

These peas were sown for a catch crop, to occupy the ground during the hot summer months, and for a manure crop alone. For this purpose, and to sow on a prepared seed bed we think we should prefer the cowpeas rather than the sweet clover. This is merely our opinion based on very limited experience.

We have not tried to feed any of the peas to stock, but shall let the Duroc-Jerseys test them soon. As a soiling crop for this latitude we deem them of comparatively little value alongside of oats and peas, and fodder corn.—Ed.)

For the Michigan Farmer.

HOP CULTURE.

I have seen questions in different farm papers regarding flax culture, showing that the industry is not entirely forgotten. But it has often been a source of wonder to me why no more interest is taken in hop culture than there seems to be. In the State of Michigan alone hundreds of dollars are expended annually for yeast cakes. Why not produce what we consume? In our eastern home I do not remember of ever seeing a package of yeast cakes bought. Nor do I remember a single farm that did not grow enough hops for home use, and we always made our own yeast. Others there were who cultivated extensive hop-yards, and they were truly a pretty sight when the vines were loaded with their graceful clusters.

As it is not an industry that is followed here to any extent, it would seem that it might be made to pay, as there would be little or no competition, and one would be sure of a home market, as there are few families where fresh hops would not be preferred to yeast cakes from the grocery store. That much of eastern customs we brought with us to our Michigan home, and from the window I can see the clinging vines which have nearly reached the topmost limit of the poles.

The soil best adapted to hop growing is a loamy clay, but they can be raised on any land that will produce corn. If it is inclined to be wet, it should be underdrained, as standing water is death to the plants. The yard should be situated so that they can get a constant supply of air and sunshine and yet not be exposed to the fiercest winds. Perhaps, with a few suggestions as to the method of cultivation, some enterprising young man may be persuaded to start a hop-yard.

First of all a thorough preparation of the ground should be given; as it is with hop-yards so it is with our orchards—they are permanent. When old growers start a new yard on sod ground, they plow it in the fall, the sod being turned under and covered, then followed by the subsoiler. In the spring it is manured heavily and plowed again and cross plowed, then harrowed and cross harrowed until the soil is as mellow as mellow can be and the manure is thoroughly mixed with it. If there is no lime in the soil, a few bushels are sown each year, as the plants require lime.

The vines are raised by runners or sprouts called "sets," and can be obtained by anyone from old hop-yards by express. These sets are taken up as soon as the frost is out of the ground in the spring by loosening the earth about them, cutting them off near the main plant and lifting them out carefully, so as not to bruise them. They are then cut into small pieces, with two or three eyes on each piece.

The field is marked off both ways, with the hills from eight to ten feet apart each way. The distance is carefully measured, as perfectly straight rows are a great help in the after cultivation. When the places for the hills are marked, two or three sets are put in a hill, eyes up, and covered from two to four inches deep, the earth pressed firmly around them and the place marked by a stake. The male plants are set at regular distances of eight hills and eight rows apart; thus making from eight to twelve male plants to the acre. These are carefully and plainly marked, so as to be known at a glance. The plow, cultivator and hoe are kept going to keep out the weeds and grass. Corn or potatoes are generally planted between the rows the first year.

The old system of training was poles, which were from 18 to 20 feet high and were awkward and unhandy, having to be taken down in order to pick the hops. A sawed stake one and a quarter inches square is now used, being eight feet out of ground. This is coated with tar to preserve it, and it is thought by many that it is offensive to the hop louse. These pests can be destroyed by dusting fine plaster among the leaves and stems. The first year the vines are trained to the stakes alone. The second year the tops of the stakes are connected by twine and the vines run all over the top of the yard. At the male hills a pole 18 or 20 feet long is placed, and the vine is trained to run up so that its pollen may be distributed on the others.

In the spring the hop-yard has to be served as we serve our peach orchards, that is, the grubs have to be hunted.

There are two kinds, both of which must be killed whenever found. In taking up sets they are never torn off nor cut out with the hoe, but after the dirt is removed from the hill, which must be carefully done so as not to injure the crown of the root, a knife is taken and all the old vines are cut off smoothly, and any runners that are seen. When the smallest vines are three or four feet long four vines are selected and the remaining ones buried at the foot of the stake. The leaves will rot and make manure, and the vines make cheaper food for the grubs than those which have been trained to the stake.

Picking begins as soon as the earliest seeds ripen. Growers would prefer that the crop should have a little more time, but think it best to pick two days too soon than one day too late, as, if Jack Frost gains admittance to the yard he plays smash, just as he does in our orchards sometimes.

The seeds are of a purple color when ripe. Some portions of a yard with a warmer slope will ripen earlier than others, and there is where the work should begin. The picking is not generally hurried the first day or two, but as soon as the crop is fully ripe then all the help that can be had is procured. It is particular business picking hops, as they have to be picked clean to be marketable. The cleaner they are the better price they will bring. We all know how it is with us in shipping fruit. If we ship a good article honestly packed and in attractive packages, we generally get good returns. It is the same in the hop business. A shipper who has the reputation of picking his hops clean and putting them up nicely will never lack for sale, even if the market is dull. The growers soon learn who the best pickers are, just as we do in our berry patch. Then they pay them good wages, treat them well, and are sure of clean hops. It pays better to pay a good picker wages that may seem a little high than to employ a poor one for less wages, for a poor picker is dear at any price.

The chief expense in hop culture is the kiln drying, and this is quite a novelty to one seeing it for the first time. The kiln generally has four apartments, the stove room, the dry room, store room and press room. It is quite necessary that the kiln should have a good draft; it is directly over the stove room and separated from it by a slat floor and a movable wire or hemp carpet. The hops are spread on this carpet, nearly two feet deep (except those first picked, which are generally green, and should not be more than a foot deep), and fires immediately built in the stoves of large, seasoned wood, and kept up until the hops are all dry, usually from eight to twelve hours.

Next to the dry room is the store room, which is kept perfectly dark while the hops are in it. The pressing and baling is generally done on rainy days, but not until four or five weeks after drying. Any screw press can be made to do the work of pressing.

JENNIE M. WILLSON.

Occana Co., Mich.

(There has been some inquiry from several readers along this line, and the above will answer questions at hand. We would like to hear from other growers.—Ed.)

A Farm Wagon for Only \$19.95.



In order to introduce their Low Metal Wheels with Wide Tires, the Empire Mfg. Co., Quincy, Ill., have placed upon the market a Farmers' Handy Wagon sold at the low price of \$19.95. The bed of the wagon is only 25 inches high, fitted with 24 and 30-inch wheels with 4-inch tires, either straight or staggered spokes. This wagon is made of best material throughout and fully guaranteed for one year. Catalogue giving full description of the same will be mailed upon application by the Empire Mfg. Co., Quincy, Ill., who also will furnish Metal Wheels at low prices, made any size and width of tire to fit any axle.

Star Grinding Mills.

With this issue the Star Feed Grinding Mill makes its first appearance for the season of 1897-8. The Star Grinders are made in several patterns, being adapted to both steam and horse power.

The No. 1 mill can be run by any common farm team or even by one good horse, and will crush and grind ear corn cob and all shelled corn and any kind of small grain singly or mixed. This machine does not require a separate power, but is a power within itself. It meets exactly the requirements of the farmer, being convenient and economical and having a capacity of 10 to 35 bushels per hour. We recommend that our readers correspond with the Star Manufacturing Co., New Lexington, Ohio, before buying a feed grinder. Tell them you saw their ad. in the MICHIGAN FARMER.

Libe Stock.

THE TAMWORTH HOG.

In answer to the correspondent who wishes a description of the Tamworth hog and the address of some breeder, I would say that I have been breeding them for the past two years. I imported a full-blooded Tamworth boar to cross with the Poland-Chinas. The Tamworth is of a deep red color, long bodied, fine boned, narrow headed, ears standing erect. The head will weigh less pounds than the head of any other breed of hogs I know of, as it is principally bone. They have light hams and shoulders. I have a bunch now that average 175 lbs. each at eight months. They have never been crowded, having foraged principally for themselves. They are very easy to dress. The quality and flavor of the meat excels anything I ever ate in the line of pork. I was right in a locality in Canada where the Tamworth hogs are raised. They cross them with the Poland-China and Berkshire, and take the lead above all others, buyers paying more per pound for them. For a block hog butchers could afford to pay more for them, as they do not trim away to fat.

I think if the writer who pronounces them coarse meat could have a good pork chop some morning for his breakfast, cut from an English Tamworth hog, he would change his mind in that respect.

Macomb County, Mich. W. H. FARR.
The live stock editor of The Farmer wrote the description referred to but misquoted by our correspondent. We republish it to show how closely it agrees with Mr. Farr's statement, and to show that it is incorrectly quoted:

"A correspondent asks for a description of the Tamworth hog, and the address of anyone who is breeding them. The Tamworth hog is a red hog, the color being similar to that of the Duroc-Jersey. If our correspondent saw the Duroc-Jersey about 15 years ago he will have a very good idea of the Tamworth hog. The latter is thin but deep-bodied, has a large head, drooping ears, pretty heavy boned, and is a hardy, active hog. Its conformation and active habits develop muscle rather than fat, and for this reason it is a favorite with bacon curers. The average American hog raiser would regard it as a very coarse animal, and deficient in both hams and shoulders. Its deep, long sides give just what the bacon-curer wants, but from its conformation we should say it was a slow grower, and was blessed with an appetite which would play havoc with an ordinary corn crop. A good many were imported into Canada, but they have been generally crossed with other breeds, farmers not liking them."

The editor denies that the above extract even suggests that the meat of the Tamworth is coarse. He also asks Mr. Farr to compare his own description of the hog with the one given above and see how much they vary. The few we have seen had very coarse heads, the ears coarser and drooping more or less. In one old boar they drooped as much as a Poland's. That is the only point of disagreement between the two descriptions. Both agree as to their light hams and shoulders, and to their having a preponderance of lean to fat. Also that in Canada they are used to cross on the Poland and Berkshire. A Canadian drover told us, in reply to a direct question, that the Tamworth was not a profitable feeder, and that farmers preferred to cross them with Chester White, Berkshire and Poland for feeding purposes. Mr. Farr admits this in his communication. We have no wish to decry the merits of the Tamworth, or any other breed, but we want the exact truth given our readers when they make inquiries. We think any unprejudiced person, comparing our description with that of our correspondent, will agree we were quite close to the truth.

For the Michigan Farmer.

FALL LITTERS.

For once I must disagree with the editor of The Farmer. Mr. Riley is right. Sows to be profitable ought to raise two litters yearly. My Berkshire sow raised 11 pigs last fall, 11 pigs this spring, and looks likely to have a bushel full about September 23 next.

Last fall the pigs made their appearance last week in August. I sold four pigs at weaning time, butchered one in the spring, and sold six the last of March. They averaged 180 lbs., and brought \$3.50 live weight. They were wintered and grown—I won't say fattened—on raw mangels and cooked

cull beans, and made me money.

Up in this neck of the woods we can't afford any elaborate fixings for hogs or anything else. Last winter I made a lean-to against the henhouse with some odds and ends of old boards, and enclosed it, except the south side. The pigs had a little better than half an acre of rye to run over on days the ground was not too soft or covered with snow.

A neighbor's sow farrowed this spring, March 19, and had nice weather. Others, myself included, had our pigs come April 15 or thereabouts, and had bad weather. Some lost nearly all their pigs. Judging by the last three or four springs, we are as likely to have good weather the last of March or early April as the last of April, and sows farrowing then are quite able and willing to have another litter in August or September. Pigs farrowed at this time will be quite hogs by the time severe weather sets in.

(Our correspondent is quite right in sticking to a method which has done so well with him. Many others have not been so lucky, or managed so well, when trying for two litters a year, and have decided that one good litter, coming late enough to prevent loss, is better for them than two with the large numbers lost. With one litter per year, we should have the pigs come on grass, and there will be ample time to grow them for the late fall or early winter market.—Ed. Farmer.)

For the Michigan Farmer.

THE HOG.

The first thing to consider in laying the foundation for a herd of hogs, is the brood sow. She should be a good suckler, prolific and capable of transmitting her good qualities to her young. It makes no difference what the breed is, so she possesses those qualities. It does not require a full-blood female, but it does require a full-blood sire to give the best results. I think the tendency in breeding at the present time is too much toward fineness. Let a man purchase a male where there are a number to choose from, nine times out of ten he will choose the finest bone and most compact form. The one that looks the nicest. These hogs have been so chosen for a long time, and the man that takes the premium is the one that shows the fattest hogs, where a better lot, although poorer in flesh, will be passed unnoticed, except to be laughed at, forgetting that fat will cover a multitude of imperfections. The first answer given to you if you ask a farmer if he is going to show his hogs at the fair, will be: "My hogs are not fitted up and are not in condition to show."

There are families of Poland-Chinas that have been ruined by this fine breeding; the pigs will soon get chuffy and fat down and never be anything but pigs in size. Then there are other strains that do well. This is becoming true with all breeds. The Duroc-Jersey is receiving this same attention. Some are getting so fine boned that their front legs grow crooked by holding up their heavy bodies. The male should be chosen with reference to the large bone rather than to the symmetrical body. I would rather have a male with a coarse bone, big, homely head and body, than to have a fine bone with a big body. I can remember when a male was chosen by the large shoulders. They wanted to see them wedge-shape, large through the shoulders and tapering back. Now, as the ham is the most desirable part of the hog, I think this order should be reversed. Give me a good, big ham every time, instead of a good, big shoulder, especially at dinner time, and that would mean breakfast and supper time, which means all the time.

It often proves better to make crosses. This holds good most where the breeding has been too much toward fineness. One of the most desirable crosses, I think, is the Poland-China sow crossed with the Berkshire sire. But I would rather keep the breeds pure, using males with large bone and good transmitting qualities.

The vitality of sows should be maintained, and to raise two litters of pigs a year, the best of care and food should be had. Very little corn should be fed for two months before farrowing time. After the pigs are three weeks old corn may be fed sparingly and increased until weaning time, in addition to the usual slops. This corn

will keep the sows from falling off so much in flesh, and do the pigs no injury. After weaning, the sows should be brought into good flesh as soon as possible, when they will soon be ready for the second litter. A trough with a little choice slops should be placed in a pen close by and fixed so the little pigs can run in under, and keep the sows out. The young pigs will soon learn to go in there to eat, and they will wean off from the sows sooner without any trouble, and scarcely know that they ever had a mother.

The old sows should be kept busy breeding as long as they are profitable, for they will raise more and stronger pigs than young ones.

For fear that two litters a year will lessen the vitality of the sows, the best sow you have can be set aside and only one litter a year raised from her, and sow pigs for breeding can be taken from her litters. This will surely keep good, strong, healthy hogs.

Sows having only one litter a year should farrow about the first of May, when the grass is tender. This is one of the best milk-producing feeds that a sow can eat. But for two litters a year, this rule cannot be followed. The spring pigs would do well, but the fall pigs would be so late that the winter would be hard on them. For two litters a year, spring pigs should come the first of April, and weaned when they are four or six weeks old.

Four weeks sounds young, but they can be successfully weaned at that age if proper care is given them, and then the second litter can be on hand by the middle of September. Such pigs will, by winter time, be good-sized shoats, and can be sold the latter part of winter at 200 pounds each. This brings in money twice a year from hogs.

The spring pigs can be sold the last of September, and the fall pigs the last of winter, and your wheat crop the last of July. This makes three fair money crops a year, pretty evenly divided.

Gratiot County.

I. N. COWDREY.

Veterinary Department.

CONDUCTED BY DR. W. C. FAIR.

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case fully; also name and address of the writer. The initials will only be given. When an answer is requested by mail it becomes private practice, and a fee of one dollar must accompany the letter.

Knuckling.—Nine-year-old horse's ankles are going over. I imagine that they are weak. Can I help him by any simple line of treatment without losing his use for a time. How should he be shod? W. K., Hillsdale, Mich.—Shoe him with high-heeled shoes with no toe. Apply equal parts tincture of arnica, extract of witch-hazel and alcohol twice a day. When the weather is cooler, you had better blister him.

Acute Indigestion.—Two-year-old mare is very hearty and a good feeder. Every few weeks she bloats and is very sick. I am afraid I shall lose her when she has one of her sick spells. What can I do to prevent them? How should she be treated? J. G. Lansing, Mich.—Give her one-half ounce ground ginger, one-half ounce bicarbonate of soda, one dram ground nuxvomica in her feed three times a day. Keep her bowels open and acting freely.

Mange.—Four-year-old colt has a skin disease. He has rubbed his mane and tail nearly off and bits his sides and legs. A dry scab forms wherever he rubs and bites. Have been feeding him sulphur. He is in good condition and feeds well. What shall I do for him? R. J., Richland, Mich.—Apply two ounces flour sulphur, one pint oil of tar, two pounds lard, two ounces turpentine to sore parts of body once every two days.

Eczema.—Six-year-old horse that I use for driving is inclined to rub his neck and shoulders. Small red sores appear on neck and body. He has had sores only since the hot weather set in. How should he be treated? W. C. Monroe, Mich.—Give one dram Fowler's solution of arsenic twice a day. Apply one ounce acetate of lead to one quart water to sores twice a day. Let him run to grass at night. Keep him in a cool, dark stable during the day when he is not in use.

Chronic Cough—Distemper.—Five year-old mare had distemper in June last. She had a cough and a discharge from nose for about two weeks. She apparently recovered from the dis-

temper, but it left her with a cough. Glands of neck are swollen. She coughs more when checked up. I use her for driving. Have blistered throat and glands with caustic balsam. Have since used tincture of iodine, also turpentine and camphor. Have given her oil of tar and cough powders with no benefit. Glands of neck are sore. When she stands still she stretches her fore feet out as far as she can. She is in good condition and eats well. Runs to grass when not in use. A. C. S., Otisville, Mich.—Give one-half ounce fluid extract wild cherry, one-half dram fluid extract opium, one dram iodide of potash three times a day. If glands are swollen, use a small quantity of caustic balsam once a week. Also give half ounce powdered licorice in each feed.

Fistula of Withers.—Ten-year-old mare has a swelling of withers on both sides. Commenced about two months ago. Have consulted different veterinarians, but none of them seem to know what to do. I used liniments with no result. Then I blistered both sides. A large amount of pus was thrown off that way. Swelling went away for a time, but as soon as wound healed, it was as large as ever. I think it will form pipes and be a fistula. Has my treatment been proper? Same mare has a sore eye. Examined her mouth and found a wolf tooth. Had it drawn. Eye is no better. Used bicarbonate of soda wash and am now using nitrate of silver with an eye syringe. Eye is very much inflamed. Different doctors call it by different names. I have not worked mare since last spring. Both blemishes came on when mare had been idle for a few weeks. She runs to grass some of the time. A. B. H., Tallman.—Swelling on shoulder should be opened. I think you will find pus. Try to get proper drainage to abscess. Apply one part carbolic acid to 20 parts water three times a day. Wound should be injected thoroughly with this lotion. Also give her one dram iodide of potash twice a day. Apply three grains sulphate of atropia, five grains sulphate of zinc to eye twice a day. Foment eye with hot water twice a day, half an hour at a time.

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The Horse.

HORSES AT THE STATE FAIR.

Perhaps the strongest object lesson regarding the present condition of the horse-breeding industry in Michigan we have seen was the exhibition in that department at the late State Fair. Outside of the horses entered in the speed classes the showing was simply ridiculously small. The stalls that had once been filled with superb specimens of the Percheron, Clyde and Shire were either empty or filled with a few nondescripts. The rangy coach horse was not to be seen, not a single specimen of the Cleveland Bay or French coacher being exhibited. The handsome trotting-bred stallions which were always a feature of this department, were conspicuous only by their absence. It must have given every admirer of good horses a shock to see what was once the most popular department of the State Fair such an absolute failure. The few horses on exhibition attracted but little attention, and must have felt lonesome while the Fair lasted. It was very apparent that horse-breeding in this State is at a very low stage at present, and that all enthusiasm and faith in the business has been killed out by the condition of the market for the last four years. The business is in about the same shape that the sheep interest was a year ago. It is down to the bottom, and apparently dead.

But it is because it is in such a depressed condition that we have hopes of its quick revival. This State, as well as the country at large, is bare of good horses. Some little efforts here and there are being made to start the business up again, but in nearly all sections horses are regarded as the worst paying stock a farmer can raise or own. Scarcity means high prices, and high prices means a rapid recovery of the business from present unsatisfactory conditions. It is time for those who take an interest in good horses to prepare for a rapid expansion of the demand for them. The advance in values will be as great and as sudden as in sheep, and those who are ready to take advantage of the change will be the ones who will secure the greatest rewards.

We would not, even with the knowledge that the price of horses would advance 50 per cent within the year, urge all farmers to go into the business of raising horses. It would prove disastrous to many of them. But those who have had some experience, and a liking for the business, we feel like urging them to take hold as early as possible, and help bring up the quality of the stock of the State to its former standard. We want fine coach horses, good draft horses, and handsome drivers. Breeds will not cut so much figure as quality. If you like a Clyde, or a Shire, or a Percheron, breed that class, only breed good ones. That, after all, is the great desideratum, and it is as true in the light harness classes as in the draft breeds. It is an opportune time to begin, and we hope by the time the next State Fair occurs, every stall will be filled with creditable representatives of the various breeds, and that Michigan will be distinctly "in it" when the big demand for good horses doubles up prices, as it assuredly will.

HORSE GOSSIP.

Star Pointer is to start against his record of 1:59 1-4 at Terre Haute, Ind., on September 28th.

The stakes and purses at the Lexington (Ky.) meeting, which opens October 5, amount to \$75,000.

The runners are doing well this season. Evanatus recently ran a mile and a half in 2:32 3/4, which equals the world's record at the distance. It was done over the Harlem course, near Chicago.

Fantasy, the mare expected to equal if not reduce the world's trotting record this season, has a bowed tendon, and of course had to be retired. She is to be bred to Dare Devil, by Mambrino King, and a good deal is expected from her as a brood mare.

It is said that the greatest care has to be exercised in the shoeing of Star Pointer, the walls of his feet being so thin that blankets are spread on the floor to serve as cushions while he is

being shod. Barefooted, his hoofs would split badly. If this is so then his days of usefulness on the track will be short.

The Highland Park Association is holding a fall meeting at the Windsor Park. They either had to do this or have an opposition meeting at Windsor and preferred to take the latter horn of the dilemma. The Windsor track has become a permanent gambling attachment of the city of Detroit, and one which she has no power to regulate or suppress.

Will Caton, well known in this State, and who went to Russia with his father, got into trouble there by striking a Russian driver, who had insulted him, with a whip, and was suspended from driving on Russian tracks. He has now gone to Vienna, Austria, with the horses Valley Queen, Monette, and Passe Rose. Caton was so successful in Russia as to secure the jealousy of the native drivers, hence the trouble.

Ornament won the Twin City Handicap at Sheepshead Bay last week, beating Flying Dutchman, Havoc and Requitul. The distance was a mile and a quarter, and Ornament made it in 2:05 1/2, which is 3/4 slower than Saluator's record for this race, the best on record. Ornament won easily at the finish, but it was a hot race until near the end. Flying Dutchman led for a mile and a furlong, running the mile in 1:40, and the nine furlongs in 1:52 3-5, then Ornament went to the front, full of running and won handily, Flying Dutchman second, and two lengths ahead of Havoc. Taral, who rode Ornament, was one of the most surprised at the time made. He said: "If I'd only known that we were going as fast as that," he said after the race, "we'd have hung up a new record. I thought we were going to finish in about 2:07. Ornament was only buck jumping in the run up the backstretch and around the turn." It looks as if Ornament was far the best three-year-old now in training.

Gov. Leedy, of Kansas, comes forward with a new and unanswerable argument in favor of the horse and buggy as compared with the bicycle. He says: "In the first place, were I a young man, and wanted to go and see my girl, do you suppose I would want to go out riding on a bicycle and be compelled to ride along, working and talking at long range? I think not. Then there is the tandem, that's what they are called, I believe. Now, a tandem may be a great convenience, a household necessity, and all that, but what is the satisfaction in going riding with your girl and being compelled to sit always too far away, and go pedaling across the country? I tell you, young fellows, that the best thing in the world is a buggy and a gentle horse. You can go out riding and enjoy it, and not be compelled to work like a Turk all the time. A man who rides a bicycle too much gets a long nose. He's always looking in one direction, and looking out for trouble ahead. No, I don't care to ride a bicycle."

Robert Kneeb, who, after serving a sentence of two years in a German prison for the turf crime of what is known as "ringing," that is, the entering in a trotting race a horse with a lower record than named, under a false name, arrived in this country some time ago and made application for reinstatement as a member of the National Trotting Association with this record behind him, has been so reinstated by Mr. Ijams, the president of the American Trotting Association, and he apologizes as follows for that action: "The German people have punished him to their own satisfaction," said Mr. Ijams, "inflicting far greater punishment than was ever before inflicted anywhere in the world for a like offense. I do not think any one will want to continue that punishment throughout Kneeb's life. That is not the theory of punishment in this country, in any event. The humane theory is to give the offender a chance after he has stood the penalty. As to the apprehension that the temporary reinstatement of Kneeb will create strife or even bad feeling between the two countries, or resentment on the part of the Berlin Jockey Club, I do not think that is warranted. The Berlin Jockey Club was not notified before I took action, but I am sure the relations of the jockey club and the American Trotting Association will not be impaired, and they are very friendly. The German people wanted to afford

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an object lesson. That purpose has been accomplished, whatever may be done with Kneeb here." Which may be all right from Mr. Ijams' standpoint, but we doubt if his conclusions will be generally accepted. Mr. Kneeb should turn his attention to some other business where there is less opportunity as well as less profit in successful fraud than in horse racing.

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The Poultry Yard.

For The Michigan Farmer.
FEEDING AND CARE OF POULTRY.

I am somewhat interested in what Mr. Hogue and others write about feeding ducks. There were probably one thousand ducks or more raised in this township this season, and I will bet a year's subscription to The Michigan Farmer that not one breeder has fed a pound of cooked feed, and you won't find a lot of poor, little stunted ducks, either, provided they had all the feed they could eat. You ask any one of these breeders if they feed cooked feed and they will laugh and say, "not much Mary Ann. When I have to cook feed I will quit the business." Had that miller's wife fed one-third each of middlings, cornmeal and bran all they will eat up clean with plenty of good sharp grit, she never would have had any trouble in getting nice, big ducks, weighing five pounds or over at ten weeks old.

Last year I hatched 34 ducks and never lost one, and their feed from beginning to end was one-half cornmeal and one-half middlings wet up with cold water. As to size, I had one drake weigh at less than eight weeks six pounds and seven ounces; the whole lot would have beat five pounds each. Geo. H. Pollard feeds young ducks two-thirds wheat bran and one-third Indian meal, wet to a crumbly mass with milk, either skimmed or whole, but not cooked. And this man raises six or eight thousand ducks a year. What kind of a figure would cooked feed cut with the big breeders down east. It would take a dozen men all the time to cook feed for one ranch. Let me give you a hard and fast rule for raising big, nice ducks. First get old stock not related, and if possible use two-year-old breeders. Have them strong and healthy and not too fat. Feed the young ducks all they will eat up clean of fine middlings, cornmeal and bran of each one-third with 10 per cent meat meal wet up with water. Keep sharp grit where they can eat all they want at all times. Give them all the water they want to drink. Follow above directions and you will never be troubled with small or sick ducks. Let me add one thing more. Keep the ducks in the shade in hot summer weather, or the hot sun and kill them.

I very seldom feed cooked feed to chickens. In very cold weather I sometimes cook a little feed and my chicks will average up in size with the rest of the boys, I guess. On Aug. 20 I weighed a light Brahma chick that tipped the beam at just seven pounds and three ounces, and he is a 15th of April hatch, making him a little over twelve weeks old. Ducks are said to grow twice as fast as chickens, but I am of the opinion it would make a duck hustle to grow twice as fast as this chick has. Now is the time when the old stock need extra care. Remove all male birds, give green stuff, milk and clean water kept in the shade. Feed wheat, oats, bran and middlings. Keep all your fowls free from lice. This is a hard thing to do as I know from experience. In the Ohio Poultry Journal for August, page 120, it says roup and colds are a bad pair of robbers, and within a month or two they will begin plying their infamous trade. Begin by preparing for them by not over-crowding the growing chicks, by thoroughly ventilating the houses these warm mid-summer nights. Provide plenty of shade and free range, with a good supper of clean white wheat, and leave them out of doors again by 5 a. m. I have done all the above except the supper of wheat and letting them out at 5 a. m. In place of the wheat I feed corn and millet. If there is a heavy dew I let them out when the sun dries things up a little. A noted judge and breeder once told me he kept his chicks shut up until about 9 a. m. In spite of good care and feed roup broke out in my chicks in July and I could not stop it. Roup is a robber all right, and a big one, too. It seems hard luck to raise a nice lot of fancy chicks and then lose half of them with roup. It does seem to me that this disease should be cured, but up to date the writer has failed to find one. I have bought freely of the sure roup cures advertised and tried most everything in the way of oils and acids, but their noses kept running just the same. I have about made up my mind there is no cure for roup except the one the

old darkey had—the ax. This is an expensive medicine to use on a flock of fancy chicks, but I know of no better one. I would not care to breed from a pen of birds that had ever had the roup any length of time. If some of the writers that harp on fancy points, new breeds, etc., would study up roup and how to cure it, some good might be done. Of what good are new breeds and fancy points if the chicks are lost by disease. Roup is not caused by filthy food, water or houses; farmers' fowls seldom have roup; it's the fancier's birds that suffer. Which lot get the best care? The fancier gives the very best of care, feed and water. The farmer cleans out his coop once a year, and feeds and waters when he gets time.

How many farmers took my advice and sorted out a pen for their best hens and mated them to a pure-bred male. If you did this you have now got a flock of nice chicks you can be proud of. Force these chicks right along with good care and feed, and this fall sort out ten of the best ones and mate them with another pure-bred male, and in a few years you will have a flock even in size and color that will give you money and pleasure. I have seen a good many small chicken coops that were sadly in need of a good cleaning out. How any one can drive a flock of chicks into a coop that has not been cleaned out for three months and perhaps a year, is something I could never understand. I have seen just such dirty coops and the owners write an article now and then about the profits to be made in keeping hens. I should expect the profits to be on the wrong side with six inches of droppings in my coops. Clean out every other day thoroughly and scatter air slacked lime.

Eaton Co., Mich. F. M. BRONSON.

For the Michigan Farmer.
OBSERVATIONS.

What do you do for chickens when they have cholera, is the cry on every hand nowadays. I am constantly working to prevent its getting in my flock, but of curative measures I know nothing. The yards plowed or spaded semi-annually, the constant fight against mites, which often reduce the vitality of the fowls until they are an easy prey to slight disorders—all these are preventative measures. Plenty of gravel, freshly drawn from the pit, or broken crockery pounded fine on a stone, will be found valuable aids to digestion. Don't think because your ground is naturally of a gravelly nature that you do not need grit. Every sharp stone may have been picked up by previous generations of fowls, and only the smooth ones remain. An old poultry raiser once told me that since she began the practice of pounding up broken dishes where they could be eaten by fowls she had not had a case of so-called cholera, whereas she had a siege every year before using it. Heavy rains have filled the hollows of the barnyard with the washings from the manure pile, and where care is not exercised to prevent it, fowls will drink it and sickness follows. And can we wonder that such should be the case.

Now the corn-crib is getting low, and many times the hens find a way to let shelled corn fall through the cracks, and they fill their crops to repletion day after day. The next thing they will be lying dead under the perch from apoplexy, caused by over-eating, and the owner will say it is cholera; or, perhaps, like over-fed people, enlarged livers result from high feeding, and the combs turn yellow, and the hens grow thin and die. Still the cry is cholera. Or perhaps the phlegmatic Plymouth Rock and Brahma are fed twice per day, and get too lazy to exercise, and indigestion results, a serious thing by the way. Or possibly the huckster, who is now buying old hens to ship, finds a dead or dying hen and drops her by the roadside, where real cholera germs are picked up by your fowls. Or the hired man works for a neighbor who has the cholera in his flock and brings home in the mud on his boots countless germs of that bane of the poultry yard. Not a mouthful of feed except table scraps should ordinary hens with free range have at this time of year, unless long rains prevent their being out. Plenty of pure water, changed often, set in the shade in clean dishes, plenty of sharp grit, clean airy coops, dust baths for rainy days, perfect freedom from vermin, will give freedom from

cholera, unless there are germs brought to the yard from infected stock. Then I know of no better remedy than the one well known to poultrymen; black antimony, sulphur and saltpeter, a tablespoonful in the feed of every ten hens twice daily. The saltpeter is to be dissolved in the water with which the feed is mixed, and a little crude carbolic acid in the drinking water; charcoal pulverized in every feed; perfect cleanliness and separation of well from sick; fumigation of premises with burning sulphur; yards should be drenched with solution of copperas, and houses and roosts likewise, and the hatchet used with mercy on all dangerous cases. Now if some one can write out a preventative of the genuine roup I shall be grateful. I have no use for cures, but by what process can we keep it out of our yards? Must we chase in our flocks when long rains come and the chicks are scattered over an 80-acre farm, or provide them with rubber suits for rainy days? Or shall we cross back to get a hardier breed of fowls?

Now is the time to lay in the winter's supply of road dust, and as the pioneers said when they bought their government claims, "Git a plenty while you're gittin'" and you and your poultry will rejoice next winter. I fill the grain sacks as full as can be conveniently handled at intervals along the highway, and as the farm wagon returns with its load from the feed mill an invitation is extended to take my load to the poultry house door. The old sacks are used and emptied into boxes and barrels ready to be stored away. How heavy they are, almost as heavy as the same bulk of stone, so it is well to put your barrels where they need not be moved.

I am raising Pekin ducks for the first time this year, and find them more hardy after the first week than I supposed. They run at their own sweet will hunting for bugs and worms, while their hen mother clucks in frantic dismay at their antics; finally she has decided to remain in the barnyard while they scour the fields, and so she waits patiently to escort them to their coop when it is time. As my hens only raise dark chicks, the barred Plymouth Rocks, the hens objected to the young ducks, and killed several of the early ones, evidently being under the impression that they were a new breed of vermin, so for a time they were confined; but they thrive much better when at liberty, and the hen who mothers 25 fights like an Amazon for her brood, so all the other fowls give them the right of way as they pass to and fro through the poultry yard three times daily, like a regiment of soldiers, varying not from day to day as to their pathway, nor turning aside to the right hand nor the left. I shall try marketing to private customers all ducks not needed for home consumption or breeding, as they cannot be kept profitably after they are full grown.

Hillsdale County, Mich. E. M. KIES.

ARTIFICIAL HATCHING.

The United States Department of Agriculture, in one of its reports, quotes from the reports of the French minister of agriculture the following passage, of interest to those who are trying to run an incubator:

"It was found that the eggs of fowls which were at liberty hatched better than those of fowls which were confined. In tests made with an incubator, it was found that eggs which were repeatedly cooled and warmed hatched much better than those that were kept at a warm temperature all the time. In one experiment the eggs are cooled by exposing them to the air for one and one-half hours daily during the whole period of incubation. This treatment retarded the period of incubation for three days. The eggs became quite cold, and it required about 12 hours to bring them up to 104 degrees F., the temperature of incubation. In the experiment, 13 out of 16 hatched vigorous chickens. The incubator had been previously used with unsatisfactory results.

"From a second experiment it was inferred that the gradual heat of the eggs was as essential as the process of cooling. Twenty-five eggs which had been laid on very warm days were placed in the incubator and exposed to the air, as in the preceding case. The temperature was such that the eggs were warmed up to 104 degrees in two or three hours. This temperature was

maintained until the brood hatched. The chickens pierced the shell, but they were so weak that they died before leaving the eggs.

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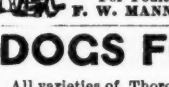


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News from Michigan Granges is especially solicited.

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Lecturer—Jason Woodman, Paw Paw.
Steward—George L. Carlisle, Kalkaska.
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COUNTY DEPUTIES.

The following named persons are authorized to organize Granges in territory mentioned:

D. H. Stebbins, Atwood P. O.—Antrim county.
L. C. Root, Allegan P. O.—Allegan county.
R. B. Reynolds, Inland P. O.—Benzie county.
Geo. Bowser, Dowling P. O.; R. C. Norton, Orangeville P. O.—Barry county.
A. L. Smith, Girard P. O.—Branch county.
R. V. Clark, Buchanan P. O.; W. H. Seltz, Royalton P. O.; C. V. Farnum, Hagar P. O.—Berrien county.
J. W. Ennest, St. Johns P. O.—Clinton county.
J. M. Willison, Battle Creek P. O.—Calhoun county.
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James B. Mann, Corey P. O.—Cass county.
F. H. Osborn, Eaton Rapids P. O.—Eaton county.
F. G. Palmer, North Star P. O.—Grand Traverse county.
B. Turner, Flushing P. O.—Genesee county.
E. O. Ladd, Traverse City—Grand Traverse county.
N. I. Moore, Moscow P. O.—Hillsdale county.
John Hunt, Verona Mills P. O.—Huron county.
D. H. English, Chandler P. O.—Ionia county.
F. W. Havens, Fitchburg—Ingham county.
J. Weston Hutchins, Hanover P. O.—Jackson county.
Geo. T. Hall, Portage P. O.—Kalamazoo county.
John Preston, Grand Rapids P. O.—Kent county.
Douglas F. Rosenberg, Kalkaska P. O.—Kalkaska county.
Hiram Bradshaw, North Branch P. O.; Chas. E. Barnes, North Branch P. O.—Lapeer county.
Fred Dean, Brighton P. O.—Livingston county.
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Fred H. Brooks, Lewiston P. O.—Surrounding counties.

THE STATE GRANGE.

The notice from the secretary of the State Grange regarding the election of delegates to the coming State Grange makes a fitting opportunity to say a word or two regarding that meeting. The importance of the State Grange to the welfare of the Grange work in general can hardly be over-estimated. In fact, we sometimes think that the meeting attains an importance greater than it should occupy. It is an unfortunate fact that usually active work in the Subordinate Granges does not begin until after State Grange. This is, of course, partly due to the fact that the Grange waits for the new officers to take hold, and yet it is also due partly to the fact that many Granges wait for the State Grange to give them the requisite inspiration for work.

The first requisite for a successful State Grange is the election of suitable delegates. It is only just to say that as a rule delegates to a State Grange are representative Patrons. At the same time, a word of advice along this line will not be out of character. County conventions and Pomona Granges should make up their minds now to select for their delegates to State Grange only Patrons who are among their very best and most active members. Do not send a man to State Grange because it is his turn, nor because he wants to go, but elect a delegate who will really represent the Granges in his jurisdiction, and who has force enough to make himself felt on the committees of the State Grange.

Again, it will be noticed that there are certain Granges which are not entitled to send delegates. This warning of the secretary of the State Grange comes in ample time so that the delinquent Granges may have opportunity to get themselves straight on the books of the secretary of the State Grange. Do not neglect to find out for certain whether your Grange is up with its dues or not. We ought to have a full delegation at State Grange, and in many instances this will not be the case unless Subordinate Granges keep up their dues. It not infrequently occurs that a certain county has one less delegate than it should have because a certain Subordinate Grange has not done its duty in this matter.

Another requisite for a successful State Grange is that the Subordinate Granges should immediately begin active and aggressive work. Inevitably, no matter how much we may strive to the contrary, Grange work will lag during the summer, and in some Granges there is a disposition to let it lag until after the holidays. To do this is a most serious blunder; three months of good work are thereby lost. We suggest that each Subordinate Grange have, at an early day, a sort of rally meeting, or, if we may be allowed to use the term with all reverence, a sort of consecration meeting. Let us bend all our energies this fall and winter toward making the Grange, in all its departments, the strongest it has ever been. We should be glad to see news notes from Granges who are willing to pledge themselves to begin active work at once, and who will undertake this rally meeting.

Another requisite for a successful State Grange is that Subordinate Granges should be discussing the topics which are likely to come up, or which they wish to have come up, at State Grange. The legislation of State Grange will not be entirely satisfac-

tory unless it is representative. That is, unless it represents the wishes, desires, and beliefs of the Subordinate Granges. This condition can be brought about only when the Subordinate Granges themselves know what they want, and are prepared to have their delegate work for it. And Subordinate Granges will not know what they want until they have fully discussed these various questions, pro and con, or at least their judgment will not be so good until after such discussion.

Let us all work as earnestly as we know how for an active and aggressive campaign before the State Grange.

IMPORTANT NOTICE!

The books of this office show at this date the following Granges entitled to elect delegates to the County Convention to be held on Tuesday, October 5, 1897, by virtue of Section 3, Article 4, By-Laws Michigan State Granges:

Allegan.—1 Rep.—37, 53, 154, 247, 296, 390, 520.
Antrim.—1 Rep.—676, 691, 709, 716, 718.
Barry.—1 Rep.—127, 145, 256, 424, 425, 472.
Berrien.—2 Reps.—14, 43, 80, 81, 122, 194, 84, 700, 382, 722, 726, 729.
Branch.—2 Reps.—88, 96, 97, 137, 152, 136, 195, 86.
Calhoun.—1 Rep.—65, 66, 85, 129, 200, 292.
Cass.—1 Rep.—162, 291, 695.
Charlevoix.—1 Rep.—689, 705, 706, 707, 719.
Clinton.—1 Rep.—202, 225, 358, 439, 456, 459, 702.
Eaton.—1 Rep.—67, 134, 360, 370, 625.
Emmet.—1 Rep.—724, 727, 730.
Genesee.—1 Rep.—694.
Grand Traverse.—1 Rep.—379, 469, 624, 663.
Gratiot.—1 Rep.—391, 500, 508, 553, 514.
Hillsdale.—2 Reps.—108, 182, 269, 273, 274, 286, 551, 181.
Huron.—1 Rep.—662, 667, 668, 680.
Ingham.—1 Rep.—241, 262, 289.
Ionia.—1 Rep.—174, 175, 185, 192, 270, 272, 640.
Jackson.—1 Rep.—155, 710.
Kalkaska.—1 Rep.—697, 674, 664.
Kalamazoo.—1 Rep.—16, 49.
Kent.—2 Reps.—19, 63, 110, 113, 170, 219, 222, 337, 340, 348, 563, 723.
Lapeer.—1 Rep.—246, 549, 607.
Lenawee.—4 Reps.—212, 276, 277, 279, 280, 293, 213, 165, 214, 384, 509, 383, 660, 703, 708, 712, 713, 720, 721.
Livingston.—1 Rep.—613.
Macomb.—1 Rep.—402.
Manistee.—1 Rep.—557, 633.
Mechanicsville.—1 Rep.—518.
Montcalm.—1 Rep.—318, 650.
Monroe.—1 Rep.—471.
Muskegon.—1 Rep.—372, 373, 585, 546.
Newaygo.—1 Rep.—495, 544, 545.
Oceana.—1 Rep.—393, 711.
Oakland.—1 Rep.—245, 257, 259, 267, 275, 443.
Ottawa.—1 Rep.—30, 112, 313, 421, 458, 639, 652.
St. Clair.—1 Rep.—528.
St. Joseph.—1 Rep.—22, 178, 215, 303, 265.
Saginaw.—1 Rep.—474.
Sanilac.—1 Rep.—417, 566, 654, 714.
Tuscola.—1 Rep.—513.
Van Buren.—1 Rep.—32, 60, 158, 159, 355, 610.
Washtenaw.—1 Rep.—52, 56, 92.
Wayne.—1 Rep.—367, 368, 389, 618, 636.

For the purpose of securing representatives to all delinquent Granges, we shall add to the list all that may report up to the last moment practicable, and delegates duly elected, who, at the Convention, show a receipt for dues for the quarter ending March 31, 1897, on which is endorsed "Entitled to representation," should be allowed to participate in the work of the Convention.

Ann Arbor, Mich. JENNIE BUELL, Sec.

GRANGE NEWS.

LOWELL DISTRICT COUNCIL.

The next meeting of the Lowell District Council will be held at South Boston Grange hall on Thursday, September 23, 1897. It will be an open meeting and questions of interest to all farmers will be freely discussed. Everybody invited to attend.

WESLEY JOHNSON, Master.

ANTRIM POMONA'S PICNIC.

Antrim Pomona Grange held its annual picnic at Eastport, August 25. A goodly number were in attendance who listened attentively to the speeches by Rev. R. Batterbee, and Ex-Senator Wilkinson of Eastport, and A. E. Palmer of Kalkaska. Brother Palmer's talk on "Soil, its origin, formation and the use of fertilizers," was especially instructive. On the evening of the same day was held a business meeting of the Pomona, at which five members were initiated.

At 9 o'clock the following morning Grange was called in the fourth degree, and a short drill on the unwritten work was given by the master, after which the lecturer took charge of the meeting and a most excellent program was carried out. All expressed themselves as being well pleased with the meeting. The next regular meeting will be held with Helena Grange, December 1.

L. S. GUYER, Cor.

KENT COUNTY GRANGE.

The regular session of Kent County Grange at Courtland Grange hall, on September 1 and 2, was a decided suc-

cess on the second day. Owing to the inclemency of the weather there was no session on the first day and evening, but on Thursday about one hundred Patrons and friends met in open session. But few were present from a distance, but those who did go felt well repaid and certainly enjoyed the entertainment given them, both intellectually and by the very sumptuous dinner which supplied the wants of the inner man.

The address of welcome given by Mrs. Saunders, the master of Courtland Grange, made us all feel that she did indeed "welcome us with the hand, the eye and the heart." The lecturer of Pomona, in the absence of the master, responded.

Bro. H. C. Dennison led in a discussion on "Why should farmers give more personal attention to country schools?" From the discussion on "Would the proposed one-cent postage law be any benefit to the farmer?" one thought gleaned was that "the farmers would be much more benefited by free mail delivery than they would by the reduction in the postage."

The Grange was thought to be a good place where there could be interchange of recipes and economical ways of doing work and thus at least partially answers the query, "If farmers' wives can not attend cooking lectures, how can they best learn economical ways of cooking?"

Bro. Saunders led in the discussion on "Does the jury system of Michigan need revising?"

Readings, recitations and music were plentifully interspersed, and all truly felt that this had indeed been a good meeting and that Courtland Grange was alive.

SECRETARY.

WHITNEY GRANGE NO. 513.

The farmers' picnic which was held September 2nd in Pickett's Grove in Arbel township, was a veritable fulfillment of the little couplet taught us in childhood:

"You'll conquer, never fear,
If you'll only persevere."

That was the third attempt made by the Farmers' Club and the Grange to hold a picnic, the first date set being August 4th, but the weather that morning was rainy. A number had gathered in spite of clouds, and late in the afternoon the storm having abated somewhat, Sister Mary A. Mayo highly entertained them, though only for a few moments, for the seats being wet all had to stand. People, however, were so eager to hear her again that they wished another attempt to be made. So the 1st of September was set, and again the faithful ones took charge of the grounds, and beautified them with evergreens, flowers, fruits and vegetables till the speaker's stand was indeed a thing of beauty. Again we were doomed to disappointment, for with Wednesday morning came a copious rain which continued all day. However, our president had happily given notice that if it rained the 1st we would have the picnic the 2nd, and that day being all that picnicers could wish, though the crowd was much less than it would have been August 4th, yet it was estimated to be fully 500, and we had a delightful and interesting time listening to the music, both vocal and by the Clio band, and to literary work by the young members, and lastly to one of the most able, earnest and practical addresses we ever had the pleasure of listening to, given by Mrs. Mary Mayo, upon "The Needs of the Hour." It is to be hoped that some were made to view the responsibilities of life in a more serious manner, which will lead to nobler lives.

COR.

TRAVERSE CITY DISTRICT GRANGE.

was held at Inland, Benzie Co., Sept. 8-9, 1897. In his address of welcome, the master of Inland Grange said: "Bound together by common interests, both socially and financially, it behooves us to look well to all the ways by which we can benefit each other. Let us, then, stand up for our rights and each other, enjoy life together, and leave the results with an all-wise providence."

In response, Worthy Master L. Sours spoke earnestly in favor of organization. He said: "Farmers can never hope to have better representation in congressional and legislative halls until they realize more fully the importance of organized effort. Men in other vocations organize for mutual benefit and protection, and the only way for farmers to cope with existing conditions is to meet organization with organization." He cited the Grange as the only farmers' organization having a national existence, and stated that the Grange has ever been fore-

most in advocating and obtaining legislation for the advancement of education among the masses, and accomplishing in various ways that which the farmer, single-handed, could not do. The membership of the Grange should be doubled the coming year.

A paper by Bro. F. Sours, on "Soil Fertility," contained many valuable suggestions, among which were: "Short rotation of crops,—a green manure crop to plow under, every time we plow, wherever possible." Recommended medium and crimson clover, rye, etc., for this purpose. Would emphasize the thorough use of barnyard manure for a top-dressing as the very best fertilizer obtainable. Considered stock-raising of vast importance in connection with other branches of farming. The results of keeping up soil fertility are obvious in the aspect of buildings and surroundings generally.

In the discussion following, Bro. Kimble of Inland, favored sowed corn in drills to plow under when about two feet high, also would give the soil an occasional rest, as he has noticed that soil around fences becomes enriched by rest.

Bro. Voorhees said he believes in but two years rotation for sandy land. Rye is a necessity when farmers begin to sow it to plow under. Grass-hoppers will not touch it but will eat clover down to the roots.

Sister McRae cited an instance of a neighbor who sowed rye in the fall and pastured sheep on it the following spring and summer, then plowed under for wheat which proved an excellent crop.

Bro. Gray favors sowing leguminous plants to a greater extent than is generally practiced. Also believes in sowing clover without other seeding and letting it remain to shade the soil for one, two, or three years.

A paper on "Economy on the farm," by D. H. McMullen, was discussed at some length. Bro. Voorhees taking the side against life insurance being economical. He has never had his life insured, as he did not wish to die and leave his wife with money which might be a temptation to some scheming rogue who would spend it all and then expect her to work to support him after it was gone.

The evening session was devoted to a general program of readings, recitations, and music, the choir rendering several glees which were much appreciated.

Bro. Edwards, a new member of Inland, read an original humorous production describing his initiation into the Order. On Thursday A. M., Sister E. J. Dickerman was called on for a paper on "Beautifying farm homes," but she stated that as she considered it "necessary work," she did as little of it as possible, and she is planning not to die from "over work," as most farmers' wives do, consequently has no experience to draw from.

There was no discussion of the topic. A paper by Mrs. E. M. Voorhees, on "The Grange as a temperance organization," called forth a lively discussion. The fact was generally conceded that the Grange might wield a mighty influence, if the right course were pursued, toward banishing king alcohol from our land and closing the doors of the mantraps which we are obliged to pass and repass from day to day, in every town of a hundred or more inhabitants.

Worthy Master L. Sours gave it as his candid opinion, that if suffrage were granted to women, prohibition of the liquor traffic and a higher code of morals would speedily take the place of our present liquor laws, and others were of the opinion that in such an event a way would soon open for the support of our government without the aid of the blood money now obtained by the liquor tax and other despicable means, for, after all, the most of this money comes from the pockets of workingmen whose families suffer for the necessities of life.

The annual meeting will be held in Traverse City, Dec. 1st and 2d, 1897.

MRS. AGNES D. LADD, Lecturer.
HILLSDALE POMONA.

Hillsdale Pomona Grange held its September meeting on the 2d, at the home of Bro. Moore. There was a good attendance.

After the usual business, "Suggestions for the good of the Order" was taken up. Bro. Armstrong: "All who are engaged in agriculture should belong to the Grange. It is more difficult to get farmers to think alike or act alike or to trust each other than any

other class. All cannot be moved by the same motive. With some it is the financial, with others the educational, and with others still the social that moves them. The Grange should as far as possible adapt itself to all. We should look more after the financial."

Bro. Porter: "We should advertise the Grange more by talking more about it to our neighbors. I found on the way this morning that those near by knew nothing of our meeting today, and it is so all over. We should have more socials."

Bro. Welper: "I think it would be to the advantage of the Grange, as much as to churches and schools, to have bells for our halls and to ring them on the occasion of Grange meetings."

Sister Bowditch: "We should have more open meetings. South Jefferson Grange has every other meeting an open meeting. Such meetings are wholly given up to literary work and the public is invited. None but members of the Grange are on the program. This is bringing members."

Bro. Burton Bowditch read a paper on the Agricultural College, which should appear in full. He showed the necessity for the foundation of such an institution, and gave its history, showing its utility in the work which it is accomplishing. It is too little known and appreciated in the State, while it is lifting agriculture out of a condition of drudgery into a pleasant profession. Discussion followed.

Bro. Dresser: "The worthy brother in his statements has been very conservative. He could with propriety have made them more forcible. The College is not sufficiently appreciated in the State. When a student there I had the mailing of the bulletins. Out of seven thousand, three thousand went out of the State. At this institution the poor are on equality with the rich. It's a good place to get rid of pride."

Bro. Strait: "Are there any statistics to show that the College graduate is more successful, or in agriculture acquires property faster than one who is not?"

Bro. Moore: "No statistics of any value could be made, for no two in other respects are alike; some have a disposition to hoard, others do not."

Sister Moore: "Those who make the most money or hoard the most are not always successful; but those who get the most pleasure or enjoyment out of their occupation."

Bro. Strait: "There is no pleasure in mortgages on the farm or children going barefoot. They are the most successful who can avoid or meet these conditions best."

Bro. Armstrong: "We should take a broader view of it than individual gain. The end the State had in establishing it was to keep up to the demands of the times. We could have kept right on killing potato bugs by hand, but science has shown us a better way. And it has also shown us how to save the crops of the field and orchard from blight and scabandmut, and to rid them of insect pests at a comparatively trifling cost. It is the work of the College, and the world at large is reaping the benefit."

Bro. Dresser: "Success should not be considered alone in dollars and cents but also in higher attainments and broader lives and the influence they have on our children. The expense of attending the Agricultural College is a great deal less than at the University, while the advantages in other respects are equally good. It is our school, our college, and as farmers we should stand by it and instruct our representatives to stand by it also."

Sister Bowditch: "Ladies also have a department in this College. Fifty dollars a year with what can be earned during the time will pay, with the advantages of not only getting a collegiate education, but also at the same time becoming skilled in some trade or in some useful domestic department."

"Does it pay in the end to put in excessive hours in labor?" was also discussed, with a universal "No" for an answer.

There were recitations by Misses Lena and Lina Buell and good music by the Grange choir. Our next meeting will be with Wheatland Grange, on the first Thursday of November.

WM. KIRBY.

[Sister Bowditch's estimate of \$50 per year as cost to a student at the College is pretty low for the average. Many young men have done as well as that, but many can not. The young ladies at present get their board at a very low figure, but they have not opportunity to earn much.—Ed.]

OUR COUNTY FAIRS.

First, they should stimulate farmers to produce better stock and crops; second, to make a success financially and to interest farmers and so induce them to patronize them. There should be lectures on stock raising, butter making and cooking, and less horse racing, as well as fewer games of chance.

There should be a more careful outlay of money, and not so much for fast horses. Pay all premiums and if necessary increase some of the premiums to induce farmers to give their patronage.

Kent Co.

SAMUEL STAUFFER.

WHY I AM A PATRON.

When the reasons for a certain line of action are numerous; when its necessity is obvious; and when that line has been followed long enough to fully demonstrate its wisdom and vindicate the judgment and foresight of the men who first indicated that line as the true one to follow, then any attempt to array the arguments in its favor may well fail to place them in the order of their relative importance. This failure will seem to occur, to some at least, under any arrangement, because what may be a strong reason to one man will have no weight with another, and the argument that appeals first and strongest to one mind would carry no force of conviction to another mind whose process of thought was governed by other rules. I therefore enumerate some of the reasons why I am a Patron, without presuming that the order of such enumeration may be the best or most logical that could be followed.

Because of the strength that comes from and with organization. All classes, from newsboys to nabobs, from bankers to bootblacks, are organized; why not farmers?

Because, in the "Declaration of Purposes" of the Patrons of Husbandry there is not a sentiment expressed or implied to which any thoughtful man can object.

Because the man who subscribes to that creed will be a better man morally, mentally, and financially, and will have the satisfaction of knowing that he is helping his neighbor while helping himself.

Because, so long as there is any reason for farmers to complain of unfair legislation, inequality of representation, or unequal burdens of taxation, it is every farmer's duty to be a member of some farmers' organization.

Because, when we consider what organization to join it is well to remember that the order of Patrons of Husbandry is the oldest, the most useful, the best governed (because governed by the members, not by its officers), has more of influence and holds more of promise than any other organization of farmers.

Because the financial management of this order has been honest, economical, and accurate; every cent that has been paid into the National Grange, or to the Ohio State Grange, since organization, can be accounted for.

Because this order was founded by farmers, is officered by farmers, is governed by farmers, and it exists only for the farmer, first, last, and all the time.

Because it is folly for us to suppose that other men will neglect or impair their own interests to advance ours.

Because, if others have protection or privileges that we have not, it is our duty to organize, to ask for what we want, to insist on having it, and to persist in our asking until we get it.

Because of the educational and social features of the order.

Because these social pleasures are heightened by the presence of the mother, sister, wife and daughter. We reverence their womanhood, we respect their ability, we enjoy their comradeship, and since they are with us it shall be said of the Grange, "Esto Perpetua."—F. A. Akins, secretary Ohio State Grange, Sandusky, Ohio.

SYSTEMATIC LECTURE WORK IN THE GRANGE.

I will suggest what I believe to be a few of the defects in general work and the remedy, as seen from my standpoint. The first is a lack of system in lecture work, in deputy work, literary and educational work and above all in co-operative work. We have labored too much as does the average farmer, hap hazard, lone handed, every one for

himself. If we can bring system out of all this confusion we may remedy the evils that surround us, if not I have small hopes of better days for farmers' organizations. I do not know where we can look for a better model to work to than the present business system of the country. We see the manufacturer, the jobber, the wholesaler and the retailer. In the line of supplies, each has his distinct field of operations, each has his share of profits, and let me say a healthy share at that.

Again, look at those who handle farm produce. They begin at the bottom and work up—first the small country buyer, then up to the great central marts, like New York and Chicago, where our produce is handled by the millions of tons. The organization is perfect and the profits to each are well defined.

Now, why cannot we adopt the same perfect system in our organization? Why not get a system and work it as the parties named do? One thing at the very bottom of all our trouble is that we do not think enough of ourselves, our business, or our Order. A "business" man, if he be nothing more than a vendor of peanuts, is "in business," while we are "nothing but farmers." We allow those who are our servants to look down on us and our occupation. We allow orders which are insignificant in comparison to the Grange to snub our Order. We must compel the world to respect the farm and farm organizations. The way to do this is to be loyal to ourselves, our occupation and our Order—the Grange. We forget that we feed the world, that we oil every wheel of commerce and trade, that without us every city would grow up to weeds, every railroad would turn into two streaks of rust, every ship rot at its dock. Let us compel the world to recognize the fact that the farm and the farmer is the keystone which supports the grand arch and then we will have a foundation to build on.

Then let us have a compact, thorough system of lecture work. Let us place the Lecturer of the National Grange in the position of commander-in-chief. Bring him in close touch with the State Lecturers, who should be his staff; these would be the field force. Then I have long advocated that each state should have a lecture bureau. Of this the State Lecturer should be the head. I would have as many connected with this bureau as we could find capable men and women who would pledge themselves to go out at the call of the State Lecturer, who would thus have reliable aids in all parts of the State. I would give him power to send them to any part of the state where lecture work was needed, whether we have any organization there or not.

The subordinate lecturer must devote all his energy to his own Subordinate Grange. The educational and literary work is and should be under his immediate charge. The success of the Grange as an educator depends on his efforts. We cannot attach too much importance to this fact. If he fails in his duties it will not be long till his Grange will begin to decline unless some other agency shall step in that will hold up the interest. The State Lecturer must be at all times in close communication with his subordinate lecturers. He must be ready at all times to aid them in their work when necessity or the good of the order requires it. System is the key note to success.—Alex. Keady, Lecturer Ill. State Grange.

Grand Opening of the Grand Trunk Railway System's New Single Arch Steel Bridge at Niagara Falls, Thursday, Friday, and Saturday, Sept. 23, 24 and 25, 1897.

The Grand Trunk Railway System will give a three days free entertainment on above dates when this great achievement of Bridge building will be formally opened to the general public.

Low excursion rates to Niagara Falls, Ont. and return will be named from all stations on the Grand Trunk Railway System, west of the Detroit and St. Clair Rivers, good going on all afternoon trains of Wednesday, Sept. 22nd and for all of Thursday, Sept. 23rd, good for return on all trains up to and including Monday, Sept. 27th. Round trip rate for this occasion only \$3.50 from Detroit.

Among the various features and attractions of the Three Days Free Carnival will be a continuous Open Air Entertainment of a unique character from two large elevated stages, erected on either side of the Niagara River. Grand illumination of the Bridge and Falls, and magnificent pyrotechnical displays and fire works, under the direction of Prof. Paine of New York, on a scale of magnificence unequalled since the marvelous display at the World's Fair, Chicago.

For program of the three days festivities, containing illustration of the New Single Arch Bridge, and particulars of Excursion rates, apply to Ticket Agent of the Grand Trunk Railway System, or to Ben Fletcher, Trav. Pass. Agent, Detroit.

Dehorn the Dairy Cows.—Removing the horns, when it is properly done by the Keystone Dehorning Knives made by A. C. Brosius, Cochranville, Pa., is not a painful operation, as is evidenced by the fact that it will scarcely interfere with the flow of a cow's milk as much as the chase around the pasture in front of the farmer's dog will do. Those best acquainted with dehorning and its results are its strongest advocates.

Miscellaneous.

MOLLY'S EYES.

If Molly's eyes would shine for me
I'd give the sun fair warnin'.
He needn't rise to light the skies,
For just the beam of Molly's eyes
Would make my mornin'!

If Molly's lips were red for me,
In weather sad or sunny,
I'd say to every golden bee:
"You needn't rob the rose for me—
Her lips are honey!"

If Molly's heart would beat for me—
So low, I just could hear it,
I'd give the world—least ways, my part—
For just the beat of Molly's heart
And my heart near it!

—Frank L. Stanton.

BALLADE.

The snow-white belly of the sail
The singing waves skims lightly o'er,
The moonlight falls athwart the rail,
Afar I see the lanterned shore,
With here and there the flash of oar;
As down the heaving waste we reel,
I dream of love and lovers' lore—
And fair Priscilla at the wheel!

The breathing of the infant gale,
The following of the albacore,
The spray that falls like tingling hail—
That gossamer gown that Venus wore!
The sea-gull flying on before—
All these the sense of love reveal
And make me hug my fancy more—
And fair Priscilla at the wheel!

And when fair Luna dons her veil—
Some fleecy cloud the night winds bore!
And darkness hides the foamy trail
Left on the sea's uneven floor;
When hopes up to the heavens soar,
And clashing hands make their appeal,
I kiss these dreams that I adore—
And fair Priscilla at the wheel!

L'Envoy.

Prince, show me no famed Bucentaur
That might o'er streams of Venice steal;
A trim yacht, night, the breakers' roar,
And fair Priscilla at the wheel!

—Harold MacGrath in Puck.

A LUMBER CAMP TRAGEDY.

I.

"I will kill you, Horace Bates!"

Two men stood in front of a forest shanty, facing each other with scowling brows and flaming eyes.

They were Oscar Fortine and Horace Bates, the former booking clerk for the big lumber firm of Wolverton & Sayers. Bates was the foreman of the shanties, and ranked Fortine, although the latter was by far the more intelligent man of the two.

The two men had quarreled ostensibly over the discharge of a friend of the bookkeeper, but really, as everybody in camp knew, over a pretty widow whose presence had graced Sayers' camp during the last week.

Fortine's face was bleeding. He had been knocked down by the foreman, and, realizing that he was no physical match for the burly Bates, he had swallowed his anger for the time, giving expression, however, to his feelings in the words opening this narrative.

Six days later the slender bookkeeper was avenged.

The body of Horace Bates was found in the edge of the woods with a bullet in his brain. Murder had been done, and suspicion, amounting almost to conviction, was fixed upon Oscar Fortine.

The bookkeeper was away at the time the crime was discovered. Hugh Warden, a friend of Bates, took charge of the camp and ordered everything necessary to be done. Warden was a tall, dark-browed man of an unsocial disposition, not at all liked by the logging crew.

It seemed natural enough, however, for him to take charge of the camp, since he was a distant relative of the senior member of the firm, and a man of considerable business ability.

"Where is Oscar?" questioned the new foreman of Grace Millen, the pretty widow heretofore mentioned.

"I'm sure I do not know," she replied, with wonder-open eyes.

"I think you do," retorted Warden rudely. "He was last seen with you. Has he run away to escape arrest?"

The black eyes of Warden searched the face of Mrs. Millen earnestly. That he suspected more than his words implied was evident. Her face grew pale, and for one brief instant she seemed embarrassed.

"Why should he fear arrest?" she asked faintly.

"Because of the murder of Hod Bates."

A sudden dash of color fluttered to the cheeks of the widow.

"Was he murdered, Hugh?" she asked, with assumed calmness.

"Yes; there can be no doubt of that. Fortine was with you late last even-

ing. You need not deny it; I saw that little tableau by the brook, madam—"

"Stop, Hugh, stop," she interrupted, with a fierce, angry gesture.

"It is useless for you to attempt to shield him, madam," Warden went on, in a low, tense voice. "I have not been blind; I have seen it all, and I tell you he shall hang. You have been imprudent; the man is a villain. You must have no more to do with him—his doom is sealed. Tell me where this lover of yours is, Grace Millen."

He seized her plump arm and held it so closely that she screamed with the pain. Her blue eyes took a fierce defiance into their depths on the instant, however, and she jerked free from his clutch with a low, angry cry.

"I will tell you nothing, sir, nothing. Oscar is not guilty of this crime. I warn you not to appear against him. I shall hate you if you do."

But Hugh Warden was not to be moved by a woman's threats or a woman's tears on an occasion like the present. He quitted her presence and set about looking up evidence against the murderer. But little was found, however. Nevertheless the new foreman felt justified in procuring the arrest of Fortine.

He went to the nearest town, swore out a warrant, and put it into the hands of an officer. This was a week after the death and burial of the late shanty foreman. Fortine was found at a dance, in company with Grace Millen.

When placed under arrest he laughed as if amused.

"You will find this a serious affair, Oscar," said Warden grimly.

"But was the foreman actually murdered? I thought he shot himself," said Fortine. "I rather guess this spite work of yours will fall on your own head in the end, Hugh Warden."

The look that Fortine's fair friend gave the foreman rather stirred him. There was something vindictive in it, even though her red lips laughed in unison with her lover.

"You are playing a desperate game, Warden," whispered she in the foreman's ear. "Why do you hate Oscar so? You shall live to regret it."

II.

At the examination of Oscar Fortine for the murder of his foreman several witnesses testified to the quarrel between the accused and Horace Bates. It was well known among the men that the accused man was insanely jealous of the murdered man, his attentions toward the Widow Millen being the cause. Since the murder the widow and accused seemed to be on the best of terms.

Mrs. Millen was too ill to appear at the examination. Fortine was held to the highest court, and, unable to procure bail, went to prison.

"So you succeeded in your plot, Hugh Warden!" cried the widow at their first meeting after the arrest of Fortine. "Had I been able to get to the magistrate's office this would not have happened. You have acted a mean part, but it shall not avail you; remember that."

Warden smiled grimly and stroked his tawny mustache. I was a young lawyer at the time, and had been retained to defend the prisoner by the Widow Millen. A more fascinating creature I never beheld, and I was not surprised that so many of the sterner sex fell victims to her smiles.

Hugh Warden told me frankly that Mrs. Millen had turned the heads of half the men in the country, and that his was one of them. Fortine seemed to be the favored one, however, and he (Warden) was in the dumps over it.

My first interview with the pretty widow impressed me with the frivolity of her nature. She was keen and cutting in her remarks about Hugh Warden, and assured me that the arrest of Fortine was planned for the purpose of ridding him (Warden) of a dangerous rival.

"But, madam," said I, "somebody murdered Bates."

"Yes, I agree with you there," admitted she. "I have not been idle while Hugh Warden has been at work to ruin Oscar. I have found the weapon from which the bullet was fired, and it is not from Oscar's pistol."

"Go on," said I, as she came to a full stop. "What about the pistol? I did not know that it had been found."

"Yes it has been found. I am to be a witness at the trial, and the weapon shall be produced, never fear."

When the trial came off Mrs. Millen was a witness, and a most important one, as she had intimidated she would be. By this time I had discovered that Grace Millen was infatuated with For-

time, and that she hated his accuser, Hugh Warden.

The evidence against the prisoner was purely circumstantial, yet it was very strong and might have prevailed had not Mrs. Millen tore it to shreds on the stand at the last. The widow's testimony was of a truly astounding nature.

She had been a veritable sleuth in hunting up evidence to save her lover, evidence that could not fail of its effect. She produced the revolver from which the fatal shot had been fired. One chamber alone was empty, and the bullet taken from the brain of the murdered man was shown to be of similar caliber to that of the weapon. This in itself would not have proved much, but when the witness followed this with testimony to show that the pistol was the property, not of the man on trial, but of his jealous rival, Hugh Warden, there was a sensation.

More than this, she stated that on the evening in question Horace Bates called on her, that while she was entertaining him Warden looked in and went away muttering. When Bates quitted her presence she heard high words without, and looking outside saw that the two men were quarreling.

She became frightened and decided to go to the house of a neighbor, half a mile distant, to spend the night. She had entered the woods on a well-beaten path, when the sound of voices fell on her ear. She would have fled back to the house had not her name been mentioned by one of the speakers. She went cautiously forward. The moon was shining brightly and she saw two men standing beneath a tree.

She recognized them easily as the foreman and Hugh Warden. They were quarreling and bandying her name. Suddenly Bates sprang at the throat of the other, and was shot through the head for his pains. She saw Warden fire, and then she fled back to her room once more. She was too horrified to speak of her night's adventure for a long time. Recently she had kept the secret, intending to speak at the trial as she was now doing.

As I have said, the widow's evidence was astounding. I watched the face of Warden and saw it blanch to a deathly hue. He rose to his feet and walked to the side of the speaker, saying as he reached her:

"My God, Grace, why have you done this?"

She did not reply or look at his startled face. Her evidence fell like a bombshell. The accused was set free and Hugh Warden was soon behind prison walls to answer for the crime of murder. It is not necessary to dwell on the case. Warden was convicted and sentenced to the penitentiary for life.

III.

People in general seemed satisfied with the outcome. Warden was not a congenial man; he had few friends, and was morose and vindictive by nature. Not many doubted. When Hugh Warden was taken away not a person accompanied him to the train; not one soul among his late companions was there to bid him farewell.

Oscar Fortine made friends everywhere, and it was a relief to the public in general to know that he was an innocent man. He remained at the camp until the following spring, when he and the pretty widow were married and quitted the woods for a nearby city, where the bookkeeper had secured a better position.

I was living in the city at this time, and Fortine and his wife became my friends. The former gave me great credit for clearing him at the trial, but I never felt that any great credit was my due, nor was I quite satisfied with the termination of the case. I did not believe for a single moment in the guilt of Fortine. He was in every way an honorable man. But was Hugh Warden really guilty?

I did not doubt but that Mrs. Millen testified to what she believed to be true, but there was a chance for her to be mistaken in the man she had seen fire the fatal shot.

I had talked with her afterward on the subject, and she seemed just as positive that she had made no mistake as she was when on the witness stand. Of course, this ended it, and I went about my business and tried to forget the tragedy of the pine woods.

A year went by, and then I received a startling summons.

"Come at once to the house—my wife is dying!"

The note was from Oscar Fortine, and was delivered by a panting lad, who had darted away after delivering

his message. Grace dying! Impossible! Only that morning I had met her tripping along, merry and hearty as a child. Here it was only 2 o'clock, and she was dying! I could not believe it. Nevertheless, I hurried to obey the summons.

Entering the home of the Fortines, I was at once conducted to the bedside of the mistress. Her face was ashen in color, and there was a look of such horror in her eyes as I shall never forget. She made several attempts to speak before the words came.

I sat down quickly and took her hand. Her husband stood near, evidently stunned and oblivious of everything.

"I—I am dying!" gasped the beautiful woman, struggling with an inward spasm. "He is—my murderer!" She was looking straight at Fortine. What did it mean? I did not understand them.

"It was all a terrible mistake," said he, hoarsely. "I forgot the bottle of poison, and left it on the stand. She took some by mistake."

"Liar!" she hissed, her face livid. "He has tired of me. And it was for such a man as this I sacrificed Hugh! Hugh was my husband, but we had been divorced a year when he interfered between Fortine and me. I fired at Hugh, but hit the other—Bates! I am guilty, Hugh is innocent. I sent him to prison for the love I bore this other man, and now he has murdered me."

The doctor came, but he was too late. Grace Fortine was dead.

Her confession was a surprising one. Her last husband believed it to be true. Her drinking the poison was all a sad mistake, and Fortine was overwhelmed with grief.

After the funeral he told me that he did not know Grace Millen to be the divorced wife of Hugh Warden until after their marriage. "She was a strange woman, yet I loved her better than my life. It is our duty to tell of her confession, and set an innocent man free."

I agreed with him, of course. Two months after Hugh Warden had come out of prison he talked long and earnestly with me.

He knew that his divorced wife had fired the shot that killed the foreman, but refused to testify in his own behalf, partly because of a lingering affection he still had for Grace Millen, and partly because he believed his word would have no weight as against that of a beautiful woman.

When writing advertisers please mention that you saw their advertisement in the Michigan Farmer.

Hood's Pills

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THE EDITOR'S DAIRY NOTES.

FODDER CORN.

The need of some soiling crop is daily becoming painfully evident on many farms where cows are kept.

Notwithstanding all the experience and suggestions given by practical dairymen, who urge that plenty of fodder corn be drilled for use in a time of need, almost sure to come every season in the last few weeks of summer, some cow keepers are now bewailing the rapidly diminishing milk flow.

There are thousands of cows wandering up and down in dried up pasture lots, from which every green stalk and blade has been eaten off into the dirt. The exercise, flies and sometimes no fresh water for the whole day, soon reduce the milk flow to such a point that the cow owners declare "dairying don't pay now." And it certainly does not, in such cases, and never will.

For several weeks our cows have been feeding on the second growth clover in this season's meadow. The feed is still good, but the cows have begun to give a few pounds less per day, for the herd, as shown by the daily milk record.

We were also feeding some fodder corn and a little grain, but today we have commenced feeding each cow all the fodder corn she will eat up clean during both morning and night's milking. The grain ration will also be increased. It does not pay to allow any cow, not nearly dry, to shrink in her milk flow, particularly at this time of year.

SELF SUCKING.

I have a thoroughbred Jersey cow that sucks herself. I have a frame on her neck, but she sucks when lying down, and that does not always prevent her; besides she cannot fight flies and is getting very thin.

Now, do you know of any device that will prevent her? I have heard that there is something patented to put in the nose. If you know or can find anything will you answer through the columns of your paper?

A SUBSCRIBER.

Livingston Co., Mich.
This is a question we cannot answer from our own experience. A case occasionally comes to our notice, and we make inquiries of the dairymen we meet as to an effectual remedy. So far no perfect preventative has been found, of which we have any specific information.

As we have previously stated in our dairy notes there are several forms of wire muzzles that fit over the animal's nose, with halter attachment. The muzzle raises when the cow or calf is eating from the ground, but falls down over the nose directly the head is lifted.

With such a muzzle it would seem to be extremely difficult to grasp the teat of another cow, and would also prevent self-sucking.

We have seen the attachment that is put in the nose, but it seems to us to be of no more value than the muzzle, and somewhat dangerous, if the points are very sharp. Cannot our readers send us a description of home-made devices that have proven effectual?

Some have recommended slitting the tongue, doing this when the cow is dry, if a self-sucker. It is not a cruel operation, though it may seem to be. This renders the act of sucking impossible.

Self-sucking, or even sucking another cow, is one of the worst vices in cow-ology. The sucker is almost as bad as the human (?) "sharper." She is not only a constant thief, but her usefulness as a milk producer is seriously impaired.

Manufacturers of wire goods send out various muzzles that are claimed very effectual. Though we never put one on a cow or calf, we have seen them in actual use and examined their merits.

Prof. C. D. Smith showed us one in use on an animal at the College last season, but we do not know whether it proved a success or not.

It seems to us that if we had a cow that assiduously devoted herself to

this habit, we should be tempted to sell her to the butcher as soon as she sucked herself dry and into good condition for the block. If a very valuable animal we should of course try every means possible to check her sucking proclivity, but in the end the self-sucker must generally "go the way of all (beef) flesh," and, generally, "it is well."

From Our Special English Correspondent.

THE MAKING OF AMERICAN BUTTER FOR THE ENGLISH MARKET.

Nothing has pleased me better while reading through the pages of The Michigan Farmer than to see the recent editorials on the important question of American butter for the English market.

Without attempting any criticism on the remarks made, there can be no doubt that, for the best butter, the best market will be at the American farmer's own door, but the question rises in my mind why cannot it be all best, and meet a demand and a market lucrative to those catering for its wants?

One thing seems to me has not as yet dawned upon the minds of good farmers and produce dealers in connection with this important subject, and it is this: The value of the English market for a good style and quality of butter. If that truth was realized, and it ought to be even ere this, instead of your states sending us a paltry 12,306 cwt. for the month of June, we should have received at least 100,000 cwt. during the same period.

If there is not money in the job, then why do other countries cater for the supplying of this market with butter?

Here is a most valuable table, showing the imports of butter into this country, worth a sober thought at the hands of the readers of The Farmer:

IMPORTS OF BUTTER.		Month Ending 30th June.		Six Months Ending 30th June.	
		1897	1896	1897	1896
AUSTRALIA:-					
South Australia	287,322	280,315	199,629	1,459,215	1,409,589
Victoria	11	1,861	10,896	114,562	91,497
New South Wales	11	86	3,060	18,745	6,308
Queensland	310	1,315	1,010	61,659	46,500
New Zealand	921	3,462	14,866	196,039	145,115
Total	289,243	293,777	214,485	1,655,254	1,551,974
EUROPE:-					
Denmark	153,819	138,973	101,989	690,279	656,849
Sweden	18,813	28,438	14,955	166,381	152,031
Germany	6,288	6,288	6,061	42,619	38,385
Holland	7,212	2,212	22,233	135,331	101,211
France	39,271	42,371	32,233	296,831	227,016
Canada	2,091	2,400	178	6,285	30,461
United States	12,306	4,190	687	158,278	129,220
Other Countries	33,629	18,010	17,970	179,278	95,792
Total	289,243	293,777	214,485	1,655,254	1,551,974

One could say a lot upon this subject, but it seems to me that the whole question resolves itself into this: What country can lay their butter on the English market at the least cost? For they that can may claim the English market, providing the same is of good quality and taste.

It will be seen from the above table what other countries are doing on this head, but it need not frighten United States producers to go in for a forward policy in face of the following facts: (1) The increasing population of Great Britain. (2) An actual increase in consumption per head.

In 1895 the average quantity of butter and margarine per head consumed in this country was 10.8 pounds, worth 8s 7d; in 1894 it was 10.6 pounds, worth 8s 6d; in 1890 it was 9.3 pounds, worth 7s 4d. Last year it was 11.1 pounds per head, worth 8s 8½d. American butter has now got a footing on this great market. It can keep and extend it by uniformity of quality, and paying regard to the customers' desires.

The future depends upon maintaining the finest uniform quality. The United States farmer must prove himself the fittest to survive by sending the best butter to be had at the price.

To make this, the points for the producer to attend to are (1) to keep improved and selected dairy cattle; (2) in colder districts to provide good shelter and housing; (3) improved feeding—to feed so as to produce the highest possible yield per head; (4) careful, cleanly and correct treatment of the milk from the cow to the dairy factory; (5) careful manipulation and manufacture of the butter; (6) absolute correctness in weight; (7) attractive, neat, cleanly boxes.

Yorkshire.

(Butter for export must mainly come from the creameries, and not in "dribbles" from the small dairy farmer's hands. Creamery butter can be shipped that will be very uniform in flavor, grain, color, salt and packing, and that in large quantities. Dairy butter, or even "creamery" made butter, as put up in small farm dairies, cannot be shipped in that condition of uniformity referred to by our friend Agricola.

We think it will be some time before the best creamery made butter will be waiting for export, under present conditions and the near future prospects of trade. But if American butter is sent abroad nothing but the very best creamery should be shipped, and the whole argument seems to prove that more creameries should be built and less butter made on the farm.

Theoretically, this plan may be correct, but past history has not furnished completely satisfactory proof. So far as our range of the horizon extends into future possibilities, we believe the creameries can be so managed for the next few years that a fair degree of profit may accrue to the managers and patrons thereof.—Ed.)

For the Michigan Farmer.

AN AMATEUR'S EXPERIENCE.

You may think it strange to hear from me upon dairy matters, but it so happened that I had to make the butter.

My wife was sick and we had to churn. Of course, anybody can churn, but when it comes to salting and making the butter that is something else, but my wife told me how to do it.

We had an old-fashioned dash churn. I had often told my wife we had better get a new churn. But she thought not, as she had used the old churn so many years that it seemed like throwing away an old friend.

But when I had to run the churn all the time, for the five months that she was sick, I made up my mind that I would buy a new churn. One day I was in town looking over the churns. One dealer said I ought to have a ten-gallon churn, as we had then two cows and might have more in the future. So I bought a ten-gallon barrel churn, and when I got home my wife laughed at me.

The dealer told me how to run it. (By the way, I had never seen one, except at the farmers' institute.) He said I should turn it about 40 or 50 times a minute. This I did upon my first trial, and after I had turned it this way for two hours and a half, my wife came out and said: "How is your new churn working?" I said, "I don't know." She said I would never get any butter if I did not turn it faster, so I increased the speed about one-half, and in a short time I had 11 pounds of butter.

This was my first trial. After this I had no trouble about getting the butter, but it did not look like that made at the institute. It was all in one lump.

At our county fair last fall we had a dairy exhibit, and there I learned how to make granular butter, and also how to salt and work it in the churn. Now I can make butter, and many of our friends come in to see me churn, and

think the butter is "so nice." We do not have any trouble to sell all we make at two to three cents above the market price.

We keep two grade Jersey cows. One of them tested 5.2 per cent fat, which was the highest of 12 cows tested. We have just bought a thoroughbred Jersey bull calf and hope to improve our stock in the future. Next year we shall keep three or four cows.

I like the dairy work so well I think in the near future we shall get a creamery. We now use the common milk crocks. We have a good cellar to keep our milk in, so we are not troubled much about sour milk.

We shall make an exhibit at our fair this fall, if we have good luck. We may not win a prize, but it will help to fill up, and we will know just where we fall and be able to improve, while if we did not show any, we would not know how to improve.

I saw Prof. Smith judge the butter last year and was much instructed in the work. Every farmer's wife ought to show at least one plate of butter at the coming fair.

Now, Mr. Editor, if my experience is worth printing put it in. And if others would "get a new churn" they could also improve.

C. L. HOGUE.

Calhoun Co., Mich.

(We have often stated at dairy meetings, in our institutes, and in these columns, that a better butter maker may generally be made out of a young man or woman who knows nothing about the details at the start, than can be made out of many old butter makers (?) who "know it all."

Friend Hogue never made any butter until recently, and has for nearly his whole lifetime lived in a city. Yet we know that he is more easily persuaded to adopt modern details, in the actual manipulation of milk and cream and the use of up-to-date implements, than many old-fashioned butter makers would be.

He may make some mistakes ere he becomes an expert, but his butter will eventually score higher in the open market than some of the butter made by makers of many years' experience. The reason is that he and his good wife are bound to acquire the whole secret, and learn all there is without claiming to know it all. This, the old-fashioned butter maker, with prejudiced ideas, cannot usually be persuaded to do.

Actual daily practice, under expert guidance, with careful daily attention to all details, will make very proficient butter makers out of thousands of farmers and farmers' wives, who now make very "ordinary" butter. We hate to say that so much of the butter made in the little farm dairies is very poor stuff when marketed, but the facts remain.

As to the "expert guidance" referred to, that is largely furnished by agricultural and dairy papers, our State experiment stations and dairy associations. The Michigan Farmer is doing this work, and we shall, during the next few years, publish in these columns a host of matter concerning all phases of dairy practice. We have numerous correspondents throughout the country, who are experts, in all that the term implies, and they have promised to give Farmer readers the results of their experience, their successes and their failures.

If you keep cows, subscribe for The Farmer and accept the cheapest and best medium for learning all there is about dairying, and thus "keep up with the procession" and march onward to success.—Ed.)

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DETROIT, SATURDAY, SEPT. 18, 1897.

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You can assure all who subscribe that The Michigan Farmer will stop promptly at expiration of time, unless ordered continued. Unlike most papers, we do not send The Michigan Farmer until ordered discontinued and then charge for the extra time and continue to send until this is paid for.

A correspondent at Etruscan, Mich., wants to know who raises White Flint corn in this State, or if it can be grown here. It can be grown all right, but we don't know of anyone who is raising it.

Mason County's peach crop, while smaller than usual, is of very fine quality, the size of the fruit extra large, and beautifully colored. The peach growers declare they will get as much clear money out of the crop this year as from the enormous one of last season. The pear crop is both large and fine in quality, and is selling quickly at good prices. Upon the whole, the farmers of Mason County are feeling pretty well this season.

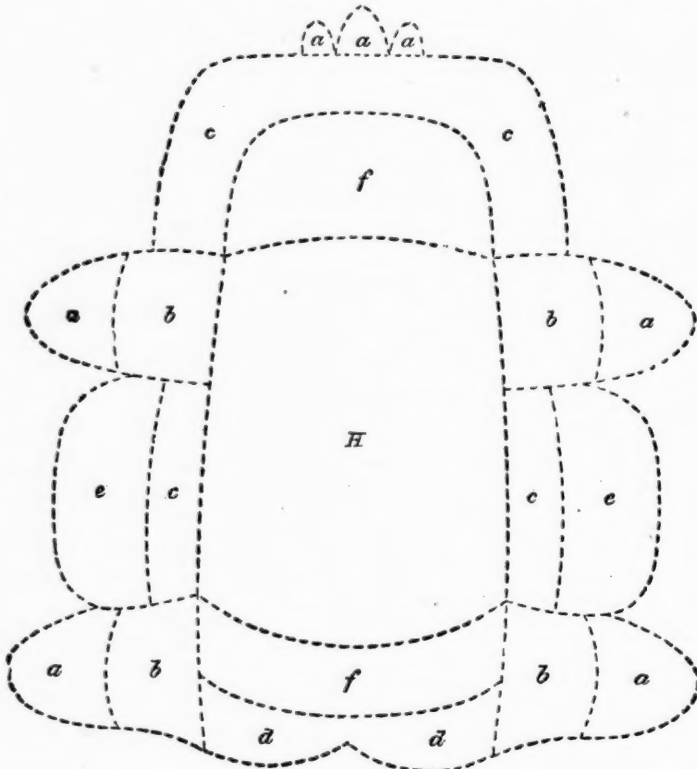
Some one started the rumor recently that the Vermont Farm Machine Company had gone into the hands of a receiver. The treasurer of the company, Mr. N. G. Williams, says the rumor is as far from the truth as possible, and that the company was never in a more prosperous condition than at present. The company manufactures and sells the U. S. Cream Separator, the Cooley Creamer, the Davis Swing Churn, the Babcock Milk Tester, and the Williams Evaporator, and in fact all supplies required in the conduct of a creamery.

SKIRTED VS. SORTED WOOLS.

The Bulletin of the National Association of Wool Manufacturers for September, of which Mr. S. N. D. North is editor, devotes several pages to the discussion of Senator Mantle's very able speech upon the wool schedule in the Dingley tariff bill, and incidentally criticises his statements regarding skirted Australian wools, de-

a fleece is divisible for manufacturing purposes. The skirting consists in the removal of the inferior extremities of the fleece. Its exact effect, in reducing the size of the fleece, may be judged from the accompanying cuts. No. 2 represents an Australian skirted fleece, in the form and condition in which it was imported into this country, and fairly typical of the appearance of all imported skirted wool.

We give the Bulletin's own words, and a fac simile of the cuts referred to. To show that others, and those manufacturers and wool-sorters, may be as "grossly misled" as Senator Man-



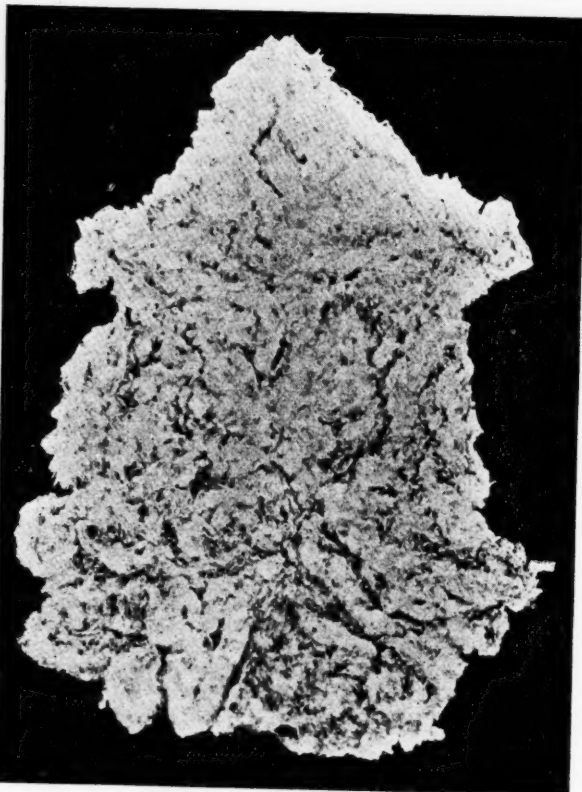
No. 1.

claring he has been "grossly misled on the subject of skirted wools." The Bulletin says:

Senator Mantle has been grossly misled on the subject of skirted wools, largely, as appears from his speech, by the report of George H. Wallace, formerly a wool grower in Missouri, made to the State Department when he was United States Consul at Melbourne. Confused in his mind as to the distinction between "skirting" and "skirting," Senator Mantle makes the extraordinary statement that "more than 50 per cent of the imported

wool, we quote from the Bulletin of one year ago, September, 1896, page 300. The writer of the extract taken from that number is Joseph Walworth, President of the Pacific Mills, Lawrence, Mass., who was writing on the characteristics of the American wool clip. Here is what he says of Australian wool:

The introduction of Australian wool



No. 2.

fleece is removed by the skirting process." To sustain this statement he reproduces from the Wallace report the diagram on the preceding page (No. 1), accompanied by a note in which he says: "Skirting, as practiced to evade the duty, consists in cutting out of the fleece the choicest, lightest and most valuable part, equal to about one-half the fleece." Thus he conveys the impression that only the section marked H in this diagram remains in the skirted fleece imported to this country. As a matter of fact, this is not a diagram of a skirted fleece, but a diagram of the different sorts into which

during the last two or three years has been a revelation to many American manufacturers. They have received the wool all coming—no dung, no skirts, no strings, no britch, no stuffings, no chaff, but only a sort. All above "off sorts" are packed and sold separately as skirts, seedy, etc.

Mr. Walworth is right in calling this skirted wool a sort—it is a sort, and nothing else. But according to the reports of those who inspect foreign

wools, not a pound of sorted wool is ever imported. It is only skirted.

Now, let us give a little more testimony on the same side. The following is taken from the statement of Mr. John Ridgeway, of Philadelphia, a wool sorter, and appears in the official report of the tariff hearings before the Ways and Means Committee when the wool schedule was being considered:

I am here to speak a few words in behalf of a man never mentioned at all today. Of course he is a workingman and does not cut much of a figure. I would make a few remarks upon skirted wools and the effect it has upon wool sorters who have to earn a livelihood by sorting. The chairman this morning stated that the imports of Australian wool to this country during the past year would amount to about 8,000,000 pounds. I have seen the day when every pound of that wool would have been sorted out. It is a question now as to the amount of Australian wool that is sorted. The question would arise between the skirted wools. I have seen in more than one mill during this past term thousands of bales of skirted Australian wool brought to the track, then to the wool washer, and it never cost a mill as far as sorting was concerned. This is not in one mill alone. I have experienced it in two mills personally in the four years. What kind of protection is that to a workingman? Tomorrow you will have these manufacturers come here. There are several in the room now. I have worked for them and they know me. They will come here tomorrow and they will ask for their protection, and at the same time they are affording skilled labor in Australia work, while their own employees are walking up and down the streets of Philadelphia and some of them actually wanting for the necessities of life. When this clause comes up, gentlemen, I sincerely trust you will give it mature consideration and try to do a little for the workingman as well as benefiting the manufacturer and dealer.

What does Mr. North, the editor of the Bulletin, think of that testimony? Is he another person who has been "grossly misled?"

While ex-Governor Rich, of this State, was in Washington in the interests of the wool-growers and farmers, he sent an inquiry to the Treasury Department, which read as follows: "How far must the skirting of a fleece proceed before it becomes sorted?" There is an extra duty upon sorted wools, and the Treasury experts are evidently still pondering upon the ex-Governor's proposition, or at least they have not yet answered it.

While on this subject we would inquire why the Secretary of the Treasury cannot have his inspectors at ports of entry levy the duty upon sorted wools stipulated in the new tariff when the skirting is carried beyond the point shown in cut No. 2, which the editor of the Bulletin says is a "fairly typical" skirted fleece. That would at once shut off all controversy, and certainly would not be an injustice to manufacturers, as their compensatory duties are allowed on the whole fleece.

THE STATE FAIR.

The State Fair for 1897 closed on Friday last. The weather was favorable, except that it was extremely warm. A few clouds would have been relished, but bright sunshine lasted every minute the fair was in progress.

From a financial standpoint the fair is said to have been a great success, some of the officials estimating a profit of about \$8,000 after all expenses are met. If these figures are approximately correct, then the State Society can meet every legitimate claim against it and have a balance to do business with the coming year. For this success the citizens of Grand Rapids are largely responsible. From the first day, when a large number of members of labor unions filled up the grounds and contributed generously to the society's treasury, until the fair closed, Grand Rapids people were present in large numbers, and took an active interest in the exhibition. There were not as many farmers and fruit-growers present as expected, and the large attendance of Grand Rapids people was all the more appreciated.

As an exhibition of the agricultural, horticultural and live stock interests of the State, the fair was excellent in some respects, and rather disappointing in others. Thus the exhibit of horses was a flat failure, and in the beef breeds of cattle Michigan breed-

ers did not do themselves justice. Thus there was only one Michigan herd in Shorthorns and Herefords, and two in Galloways, while the only Polled Angus shown came from other states. The Holstein, once a feature on western Michigan farms, was not represented at all, and the only Devons shown came from Ohio. Compared with 10 or 15 years ago the exhibit of Michigan cattle, excepting in Jerseys and Red Polls, was a lamentable failure. It is true some exceedingly fine herds from Indiana, Ohio and Illinois filled these classes in a creditable though meager manner, but Michigan was not "in it" with them at any spot or place.

CATTLE.

Shorthorns.—Three herds of Shorthorns were shown, namely, those of John Lessiter & Son, of Cole, Mich., M. T. Miller, Randolph, Ill., and the Robbins Stock Farm, Horace, Ind. The two foreign herds were in as fine fix as it was possible to put them. The stock bulls at the head of each were magnificent animals, of Scotch blood, smooth, deep fleshed, symmetrical and with great substance. They were rolling in flesh, as were the females shown with them. John Lessiter & Sons showed their herd of Scotch bred cattle in ordinary condition, and while they could not show up with the grand circuit herds, fitted to the utmost, for all practical purposes they would be the safest animals to tie to. It requires moral courage to resist overfitting a fine show animal and thus spoiling its future usefulness. The Messrs. Lessiter have a fine herd, and what is better it has never been spoiled by overfitting. We would like to see the State represented by a dozen herds of the same useful sort.

Herefords.—A. S. Walcott, of Concord, was the only Michigan breeder represented. His herd was headed by the neat young bull purchased in Illinois last spring. The herd was in its usual condition, just as the animals looked last spring, with the exception that their coats showed more bloom as the result of the expenditure of elbow grease. John Hooker, of New London, O., and Harness & Graves, of Bunker Hill, Ind., had fine show herds, fitted to the hour, and carrying all the flesh that could be crowded on them. They made a most attractive show.

Galloways.—Michigan had everything her own way in Galloways. Chapman Brothers, of South Rockwood, had eleven head of their fine herd, a very creditable lot indeed, and E. L. Davis, of Davisburg, showed ten head. They were the whole thing, and the premiums were divided between them.

Red Polls.—There were two herds of Michigan cattle in this class, those of J. F. & E. W. English, of Clarks-ville, and J. M. Chase, of Muir. These are two of the earliest breeders of Red Polls in this State, and they stick closely to their favorites. The Messrs. English had twelve head, and Mr. Chase eleven. The other herd was a circuit one from Ohio, owned by Andrew Brothers, of Cedarville. It was fitted in great style, and in some instances so as render them liable to become useless as breeders. But they served to show that the Red Polls could carry plenty of flesh when necessary.

Polled Angus.—Two herds were shown in this class, both from other states. B. R. Pierce, Creston, Ill., and D. Bradfute & Son, Cedarville, O., were the exhibitors, and certainly they made a grand showing for this great beef breed.

Devons.—Two Ohio breeders fought it out in this class—D. J. Whitmore, of Casstown, and W. E. Lewis, of Troy. They divided the premiums, and ought to be satisfied. They had a fine lot of cattle. Once the Devon was a favorite on the light lands of this State, but apparently it has disappeared, and left its place to be filled by the Red Polls.

J Jerseys.—The Jersey has evidently got a strong hold among the dairymen of this State. There were five herds on exhibition, besides some individuals entered singly. F. F. Marston, of Bay City, had a large draft from the Riverside herd, started by his father, the late Judge Marston. The young man seems to be keeping the herd up to its old standard. O. J. Bliss & Son, of Silver Creek, had a nice bunch from their herd. The Messrs. Bliss come out every year and help to make a good showing for the breed.

They are not going backwards. W. R. Montgomery, of Hillsdale, another old reliable, was on hand with a good draft from his herd; and a new exhibitor, M. H. Edison, of Grand Rapids, and Frank Martin, of Battle Creek, made a good showing. It was the only class which was up to the standard in numbers.

SHEEP.

The revival of interest in sheep husbandry was exemplified by the increase in the list of exhibitors in this department. Merinos made the best showing in three years, and we were pleased to see some of the veterans on hand with drafts from their flocks.

Merinos.—Eight exhibitors, all from Michigan, appeared in this class, all with large exhibits. H. E. Moore, Farmington; A. A. Wood, Saline; Chas. Beahan, Palo; R. D. Stevens, Flint; Elmer F. Cilley, Chandler; W. M. Chapman, Romeo; Chas. A. Chappell, Moline; G. W. Inman, Ypsilanti. George W. Stuart, of Grand Blanc, placed the ribbons, and he had large and difficult rings in nearly every class.

Delaine Merinos.—C. H. Williams, of Church, Mich., had a fine exhibit of National Delaines. The improvement he has made in his flock in the past two years places it close to the front. He had some beautifully fleeced sheep, and they were strong square-bodied animals which ought to feed well. A. T. Gambier, of Wakeman, O., had a good exhibit of Standard Delaines. He has shown in Michigan several years, and always successfully.

Rambouillets, or French Merinos.—A. A. Bates, Irwin, Ohio, had 17 head of good ones, and E. L. Davis, of Davisburg, also had a big bunch. But the exhibit was behind former years in numbers. We missed Wyckoff, Townsend, Eager, and others who used to be prominent in this class.

Shropshires.—This favorite breed was not present in as large numbers as a year ago. Five breeders were on hand, all from Michigan but two. Those two, George Allen, of Allerton, Ill., with Dan Taylor in charge, and it is safe to say that when Dan is beaten the sheep that does it is a good one, and George McKerrrow, of Sussex, Wis. The others were E. K. Carr, Jonesville; John Walton, Calkinsville, and John Milton, Marshall. The competition was very hot, and E. K. Carr, a new exhibitor, had a two-year-old ram that made the others take a back seat. Mr. Taft, of Mendon, awarded the ribbons.

Hampshires.—There were three exhibitors in this class, all from Michigan, namely, A. J. Hiller, Four Towns; John Milton, Marshall; and Wm. Newton, Pontiac. There were some very fine specimens of this breed shown, Mr. Hiller especially making a large exhibit.

Oxfords.—We were disappointed that more of this breed did not show up. Michigan must have twenty-five breeders, and only one showed up—Wilson Neeley, of Brooklyn. He deserves credit for his enterprise. The other exhibitor was George McKerrrow, of Sussex, Wis.

Southdowns.—In this breed Mrs. E. C. Wheaton, of Marshall, represented this State with some very creditable animals of her own breeding. She is a great admirer of the breed, knows its history and appreciates its many excellencies. She is building up a fine flock. George McKerrrow, of Wisconsin, was the other exhibitor.

Lincolns.—Only two of Michigan's breeders showed up in this class—Mr. J. England, of Caro, with a bunch of thirteen, and A. H. Warren, of Ovid, with about as many. The quality of the sheep shown was very good, and the large square bodies were covered with a long lustrous staple of wool. We looked for more exhibitors in this class, however.

Cotswolds.—These were shown by Wilson Bros., of Muncie, Ind., W. R. Montgomery, of Hillsdale, and Wm. Newton, of Pontiac.

Leicesters.—John Walton, Calkinsville, was the only one exhibiting this breed, which seems to have dropped out largely since the Lincolns obtained a foot-hold in the State.

HOGS.

There is no doubt but that the exhibit of hogs was a good one, and most of the exhibitors were Michigan men. The Berks and Polands were very strong classes, as were the Chester Whites and Victorias. The Duroc-Jerseys were not in such numbers as we expected, a good many of

the veterans not showing up. Sharpe Butterfield awarded the premiums, and he is capable of doing it in an intelligent manner.

Poland-Chinas.—There was a strong exhibit in this class, and all from Michigan. C. A. Searing, Lyons, Fred Cox & Son, Big Rapids, Harrington Bros., Paw Paw, who are following in their father's footsteps; A. A. Wood, Saline, with eleven head of beauties from Hickory Grove; L. F. Conrad, of Wacousta, with the same number, and they were good ones, equal to the best; G. W. Inman, Ypsilanti, with 11 head; Robert Neve, Pierson, with twelve head; Wm. Motter, Pottersville, and M. M. Green, Grand Ledge, with eight head. There were very few hogs that anyone could find fault with, and a good many that could safely stand up with the herds of any state.

Berkshires.—This was another strong class, considering there were only two exhibitors. N. A. Clapp, Wixom, and Nick Creveling, of Alpine, Kent County. There should have been a dozen others, but we presume the two exhibitors were quite well satisfied as it was.

Victorias.—George Inelchen, Celina, O., had sixteen head; R. M. Cross, Ovid, ten head; M. T. Story, Lowell, fifteen head; and M. H. Walworth, Hillsdale, fifteen head. The Victorias seem to be taking the place of some of the other white breeds, and are quite strong in this State.

Duroc-Jerseys.—There were only two exhibitors in this class, W. A. Spicer, Charlotte, Mich., with seven head, and Clayton Borrodalle, Camden, Ohio, with sixteen.

Small Yorkshires.—Neely Brothers, Cambridge, and Bascom & McMurphy, of California, were the only ones in this class. They showed some nice hogs of that type—smooth, meaty, short-legged, fine-boned and white in color, with noses so short that they appear to set back in their heads. They would have a time doing much rooting.

Essex.—Two Michigan breeders and one from Indiana, showed Essex hogs—the neatest hog known, and once a great favorite in this State. W. J. Neeley, Brooklyn, had eight head, M. H. Walworth, Hillsdale, one boar, and Stoltz Brothers, Westchester, Ind., nine head.

Chester Whites.—There were four exhibitors in this class, all from Michigan. E. A. Acre, of Ovid, had twenty-four head; Chas. Wells, Berlin, sixteen head; C. A. Searing, of Lyons, and G. S. Benjamin, of Portland. It was a good class, and represented the breed well.

POULTRY.

The show of poultry was really one of the best features of the fair. The entries numbered 1,506, and not only filled the hall full, but also a large tent. The fowls were crammed in very closely and during the warm part of the day on Wednesday the heat was suffocating. The fowls lay on the bottoms of their coops gasping for breath. That building should be enlarged to more than double its size, and arrangements made to protect the fowls from the heat of the sun, and secure proper ventilation. It is a great risk to show valuable fowls at this season of the year, and every possible arrangement for their comfort should be made. Then we think the various breeds should be placed together, as with live stock, so that the work of the judge may be expedited as much as possible. When a judge has to pass from a building to a tent several times to find the various entries in a class, it makes hard work. The crowded state of the building prevented a proper arrangement of the entries. Mr. S. Butterfield awarded the prizes, and his work is always satisfactory.

AGRICULTURAL HALL.

This hall was not filled as well as it should be, but better than at some previous fairs. It seems difficult to get many farmers to bring out their grain, vegetables, etc. There were a large number of entries of Dawson's Golden Chaff, and the growers had big stories to tell of the yield. There were some good samples of oats, but other grains, such as rye and barley, were not shown to any extent.

HORTICULTURAL HALL.

It would not have been unexpected if the exhibit in this department had been light, in view of the condition of the fruit crop. But some hustling was done, and the hall presented a very handsome appearance. The long tables were well filled with fruit and of fine

quality, free from scab or the marks of the ever-present worm. The firm of Ellwanger & Barry, of Rochester, N. Y., made a fine exhibit of pears of a great many varieties, nicely labeled, and really a good thing for the fruit-grower to study. Flowers, foliage plants and evergreens were deftly used in the decorating of the hall, and altogether it was a pleasant and beautiful place for the lover of fruits and flowers.

DAIRY AND APIARY.

The exhibit in this hall included all sorts of dairy and apiary supplies, with a fair show of their products. It strikes us there ought to be some means adopted to bring out a great number of exhibits in dairy products—both butter and cheese. How it could be done is the question, but the subject is certainly one worthy of attention.

AGRICULTURAL IMPLEMENTS AND MACHINERY.

In this department the exhibits were quite extensive and interesting. The number of windmills and fence machines shown proves the general interest of the farming community in them. The fence machines are really ingenious, and the work they do wonderful. The smooth wire fence has the call at present, and we are glad to see barb wire being so rapidly displaced. The seed-drills, feed-cutters, cultivators, etc., etc., were shown in large numbers, and this is a part of the fair which should prove very attractive to farmers.

WHEN TO SEND SUGAR BEETS FOR ANALYSIS.

The following correspondence brings up a subject of practical importance at this season of the year:

Prof. R. C. Kedzie.
Sir—What time do you want sugar beets sent to analyze? We have some fine beets, and can send them any time. I am, etc.

Oceana Co., Mich. T. S. GURNEY.
Agricultural College, Sept. 8.

T. S. Gurney, Esq.
Dear Sir—Wait till the beets are ripe. They are green and sappy now, but during this glorious sunny weather they are storing up sugar every day. If this weather continues I look for a rich crop of sugar beets, and hope it will continue hot and sunny till the middle of October.

In any event do not send the beets till they are ripe unless you want a discouraging report of the amount of sugar. When leaves ripen up and begin to fall off, it will be time to send them in. October 15 will be early enough, and if weather is favorable and frost holds off, a later date may be better. Yours truly,

R. C. KEDZIE.

Hog cholera is reported from Ionia and vicinity.

TO CURE DYSPEPSIA.

A New Remedy Which Will Do It.

Chronic dyspepsia is considered by many people to be nearly if not quite incurable. No good reason can be given why they think so except that perhaps they have tried various remedies without much, if any benefit. But the progress in every branch of medicine has been such that among other things a lasting cure for indigestion in its chronic form as well as temporary has been discovered and is now placed before the public strictly on its merits as a permanent cure for all stomach troubles or difficulties with the digestive organs.

This new treatment is called Stuart's Dyspepsia Tablets, being put up in tablet form so as to be easily taken and also to preserve its good qualities for an indefinite length of time.

This remedy has produced surprising effects in the worst forms of indigestion, and in many cases where ordinary remedies failed to give even relief, Stuart's Dyspepsia Tablets have fully cured.

The splendid results from using this preparation are owing to the fact that it is prepared and intended for Dyspepsia and stomach troubles only. It is not a cure-all like so many advertised remedies, claiming to cure everything under the sun, but it is claimed that it is a certain cure for Dyspepsia and anyone suffering from any form of indigestion cannot fail to get permanent relief and cure from its use.

It is so prepared and the ingredients are of such a nature that when the tablets are taken into the stomach they digest the food no matter whether the stomach is in good working order or not. You get sustenance and strength to mind and body by reason of the food being properly digested and at the same time the much abused stomach is allowed to rest and recuperate.

Notwithstanding the great benefits to be derived from Stuart's Dyspepsia Tablets, the price is but 50c. for full sized package and all druggists sell them.

A little book on Stomach Diseases mailed free by addressing the Stuart Co., Marshall, Mich.

The Household.

CONDUCTED BY MRS. ELLA E. ROCKWOOD, FLINT, MICH.

We should be pleased to have any of our readers who take an interest in household topics, send in their views and opinions upon any subject which is under discussion, or which they wish discussed. The invitation is general, and we hope to see it accepted by many. Address all letters for The Household to Mrs. Ella E. Rockwood, Flint, Mich.

WORTH THE WHILE.

ELLA WHEELER WILCOX.

It is easy enough to be pleasant
While life flows like a song.
But the man worth while is the one who
will smile
When everything goes dead wrong.
For the test of the heart is trouble.
And it always comes with the years.
And the smile that is worth the praises
of earth
Is the smile that shines through tears.
It is easy enough to be prudent
When nothing tempts you to stray.
When without or within no voice of sin
Is luring your soul away.
But it is only a negative virtue
Until it is tried by fire.
And the life that is worth the honor of
earth
Is the one that resists desire.

By the cynic, the sad, the fallen,
Who had no strength for the strife.
The world's highway is cumbered to-day;
They make up the items of life.
But the virtue that conquers passion,
And the sorrow that hides in a smile—
It is these that are worth the homage of
earth.
For we find them but once in a while.

HOME CHATS WITH FARMERS' WIVES.

THE NEW BABY'S WARDROBE.

This is something which is quite apt to puzzle the young wife. Heretofore she has given such matters very little, if any, thought, merely because she was not interested in them. Now, all at once they begin to assume greater importance, and she finds herself pondering upon the question of a suitable wardrobe.

What shall she buy? How much of each kind of material? Where shall she obtain patterns? Wise indeed is she if she will go at once to some friend who has had experience and frankly ask for information.

But since not everyone has the opportunity of doing so, some such information will be given here, and this partially in reply to a query regarding the subject which was received the past week. In the letter, which was not for publication, the writer said she knew that many young and inexperienced wives would be grateful for such information, and asks those who have little children if they will not write more about their clothing, care, treating their little illnesses, etc.

Of materials from which to fashion little dresses there are none which are so commonly used nowadays as fine checked nansook, dimity and India linen. These are fine and soft, very suitable for such use. Two yards will be sufficient for each garment. Cut two breadths three-fourths of a yard long, leaving half a yard for yoke and sleeves. Turn a three-inch hem at the foot. Hemstitching is a dainty finish for this, otherwise hem it neatly in the ordinary manner. Gather the straight breadths to a tiny yoke of the goods, either plain or ornamented with tiny tucks. All over embroidery may be employed for the yoke if desired, in which case it must be very fine and dainty both in material and pattern. The gathers are usually overlaid at the joining with seam covering, a fine, narrow tape which can be bought for a few cents a yard. Baste in position and stitch both edges on machine.

Sleeves are of bishop shape, quite full, with lower edge ending in a tiny frill over the hand. Stitch some of the seam covering over the gathers, same as the yoke. The neck may be finished with fine soft lace in narrow width or a very narrow edge of fine embroidery. Never put a particle of starch in these; they must be just as soft as possible. What torture to baby flesh can be greater than starched garments, especially about the neck and arms.

ments, especially about the neck and arms.

The number of these little dresses must be regulated by one's pocketbook; four, at least, will usually be required. Tiny slips of sack shape (which may be used as nighties, too,) should be provided for morning wear. If one chooses, these may be of dainty figured dimity, but while a baby is very young nothing looks so well upon it as white. But whatever the material, remember it must be very soft, and all garments should be washed several times before being worn. Six of these garments will be required; four may possibly answer.

Instead of the old-fashioned wide bands upon every petticoat we now have a waist made separate with its lower edge furnished with buttons to correspond with buttonholes in the several skirt bands.

In this way any skirt may be removed without disturbing the other garments. All buttons should be medium size, very thin pearl. Three flannel skirts will be needed, one of them for best wear. These may be purchased with one edge already finished for bottom of skirt, or the plain flannel may be bought and finished at home in any manner desired. A pretty way is to mark scallops with a spool, then buttonhole them all neatly with white embroidery silk, cutting out when completed.

Most mothers use a "pinning blanket," made of a plain width of flannel fastened to a band but left open down the entire front. This extends well below the feet and provides for tucking the little pink toes up comfortably.

For white cotton skirts, fine lonsdale muslin or cambric is used. Dainty needlework and material soft and fine is rather to be chosen than elaborate tuckings and trimmings.

Little shirts in softest wool, or in gauze for summer wear, can be purchased at the stores, and it is better to do this than to make them at home. Wash always with borax water—a teaspoonful to one quart—as hot as can be borne by the hand, and they will not shrink, but remain soft and fleecy. Bands may be knitted round and round (seamed every other stitch) of white saxon, or a straight piece of softest flannel may be used for the purpose. If the latter, place seams in the lower part, goring, to give a good fit over the abdomen.

Open these seams and feather-stitch down with white silk; also buttonhole both top and bottom edges with the same—no hems. A tab at back and front is a great convenience to secure the napkin from slipping out of place.

Fasten with safety pins. Will someone tell an inquirer how many stitches will be required to knit a band for a young babe; also how wide to make it?

Three dozen napkins are none too many, and may be of light weight white or cream outing flannel or of rather thin cotton flannel. These are particularly nice for winter. Old soft muslin or linen is desirable for the first few weeks, and these can be made rather small. Above all things, do not burden a little child with heavy napkins. I have known cases where this has resulted in causing bowlegs. It is nothing less than cruelty!

Some mothers are so careful lest a child's clothes become damp that they inflict present pain and future mortification upon it. The bones of a little child's frame are so soft and pliable that they are easily deformed.

I am convinced that many cases of bowlegs are directly traceable to this cause.

There has been in use for some time a new arrangement for baby's comfort

whereby much of the bungling folds of cloth might be done away with. A piece is cut out of the center of the ordinary square diaper, shaping it somewhat to the form when put in place. One mother who has tried these says she does not think they pay for the extra labor of making and has discarded them. Will someone who has tried them tell us their opinion in regard to this?

A FEW WORDS TO GIRLS.

I wish to say a few words to girls. I have never visited the Household before, but the talks and advice have been of great value to me. Just now I am interested in this great marriage question, as I presume all girls are, for I am a girl, or not so far removed but what I can repeat Madame De Staël's famous reply to Napoleon: "Sire, I am not so old but that I can remember my youth with pleasure."

I would say to girls, don't be in a hurry to get married. Remember it is a lifetime business. Don't think, as a great many do, that if you are not married at twenty-five you have no chance at all. It is no disgrace to be an old maid. You might better be fitting yourself to earn your own living than to be fretting about being an old maid. Look at the misery around us, the result of hasty marriages. I could mention at least six in our own little town, but will only tell you of one.

A pretty girl of poor parentage, disliking the drudgery of farm life, met and fell in love with a well-dressed, rather dandish-looking young man from a certain city in our own State. Knowing next to nothing about him but his own story (he posed as a very religious, moral young man), she married him and went to live with him in the city. The not surprising results were, she soon learned him to be a drunken rake, and in less than six months came back to her home a broken-hearted woman.

Never fancy you are very much in love; take time to consider. It may be only a fancy that would wear off if deprived of the society of the one you admire. And, girls, don't be so ready to trust. Don't give a man that has no means of keeping you your heart and confidence. Men are fickle, and the chances are he might change his mind. Never tell them your secrets or let them know in any way that you care for them, unless you are engaged, and even then it is safe to be discrete. And, girls, keep pure! Keep your hearts and minds free from all evil. It is so easy to be led astray. Remember that a man who leads you to do wrong is not the one who loves you or intends to marry you. If this advice was kept by everyone, the world would be full of good girls, good wives, and, yes, good men, too.

ID.

THE UP-TO-DATE YOUNGSTER.

"Let us write of the children," says one, and I am in a bad mood when I fail to respond to that call.

A rollicking, up-to-date baby boy has been making it lively for us for a few days, and it troubles me to adjust the loss, now that he is gone.

There are those of my generation who look with terror upon the children of to-day. They call to mind the demure, docile baby of fifty years ago, and the comparison argues poorly for the late arrivals. For myself, I like the new baby. As ex-Governor Flower says of trusts, "They are a necessity to progress." They are the natural result of their environment, and are all right, to meet the demands awaiting them.

The little lad mentioned above, is a fine type of hustling babyhood; he never lost a moment in showing his colors. When but a few days old his vigorous demands that we were unable to interpret, brought from his young mother this query: "What do

you suppose he wants?" Possibly a B flat cornet, I replied, and in spite of that disturbed, midnight hour, we both laughed. The facts were that at the most impressionable period of this young life, the mother was playing in a ladies' brass band, and indulging in all the excitement of a political campaign.

When it becomes a feature of popular education that surroundings have so largely to do with results measures may be adopted to avert the undesirable and to attain that to be coveted. That the tendency of the times, the sentiments of the day, mould the coming man, and woman, there can be no longer a doubt.

A writer for the Progressive Review claims that kleptomania is transmitted to women by fathers, or some other male ancestor having a criminal taste for money getting. He says, "This ancestor has pandered to an undisciplined extent to the collecting instinct, using all the weapons with which modern commercialism has armed him, heeding no scruples, knowing no conscience, then transmits to his descendant, a woman of weak will, the overmastering desire to acquire. He, endowed with fitting opportunities, was a manufacturer, a man of commerce, or company promoter, she unable to exercise her inherited instinct, not even realizing her bent becomes a kleptomaniac."

We laugh when the term "born tired" is applied, but the man of science tell us they are increasing, owing to the rush and strain of modern life. This is a question of intense interest, because of its favorable and also its alarming force.

At a time when child-study would have been very helpful to me I passed it by. To-day it is one of the greatest sources of happiness. When I made that inevitable "bend in the road" I made it reluctantly. While the sunlight of hope and anticipation that marks the first portion of the journey had so often proven delusive I preferred it to the sombre shadows of certainty that settle along the declining pathway. But the beautiful charm of childhood reconciled me, and may we all be grateful that the sweet voices of children can be heard all along the journey from start to finish.

The company of a little child is to me now much like the opening of a new periodical or review. I am sure to find something I never thought of before. Two little fellows who have just reached the school age have been to me an elixir. One is a bookworm, the other a keen student of every living force and the embodiment of perpetual motion. He comes often, and usually tells me, with a hurried, business air, "I can't stay but half an hour." When the time is up he says, "No matter I am not going yet, in a good while," and sometimes it requires the most astute strategy to bring it about in a reasonable length of time.

He told me once, with quite a pathetic tone, "I've lost my girl." How did that happen? "Oh! they won't let her come to play with me any more. But," he continued, brightening up, "I don't care, girls don't know much! they don't know which end of a duck to go to when they want to drive it." I knew he had gleaned his conclusion from an experience, and as such obstinacy in my own sex was unpardonable I remained silent. He brought his new dog down to show him to me. Among other startling revelations respecting his canineship was the pedigree, which he declared to be "half plug, half dog."

My other little friend wants me to take a book, and talk of the pictures. Natural history is his bent. A short time ago he saw an elephant, and this was his description to his less favored playmate: "It was large as four calves and had a tail on both ends of it!"

Dear little friends you have been a pleasant pastime, and not the least in-

Enameline

The Modern STOVE POLISH.

Produces a JET BLACK enamel gloss. Dustless, Odorless, Labor Saving. 5 and 10 cent boxes. Try it on your Cycle Chain.

J. L. PRESCOTT & CO., NEW YORK.

teresting feature has been my study of how you came to be as you are.

The majority of my summer guests have brought babies and truly I can say the young mother of to-day needs sympathy as well as patience and skill. One thing there is in her favor over the generation that preceded her, the fathers are more helpful, more considerate. A better recognition of woman's natural rights has awakened this sentiment.

Very promising, in many ways, is the outlook for these little ones. This thought came to me with force as I read the proceedings of the National Educational Association, held in Milwaukee, June last, when 10,000 delegates congregated to hear the best, the broadest minds outline a course for mental and moral training. Ten thousand delegates will carry to 10,000 points these advanced and beneficent principles, and gradually they will be filtered into all the places of learning, and the mother, who wrote, "talk of the children," and tells us that her window view gives back only pine stumps, may trust that her little ones will share the fruit of this and kindred effort.

Flint. LUCY SWIFT.

MARRIAGES WHICH MAKE ANGELS WEEP.

A happy marriage made in heaven! How beautiful it sounds. I once heard the minister say after performing a wedding ceremony, while congratulating the couple, that angels rejoiced at such a union, but I have seen unions that I have thought would make angels weep instead of rejoice.

We all know of unequal marriages, and yet they were not lacking in love on the start, for I do not believe love lasts long after confidence and respect are gone. I believe a marriage founded on love alone is on a very poor foundation. I think a better test would be for young people to ask themselves is this man or woman of good moral character? Is there anything in his or her habits that will bring shame and disgrace on the future life?

I knew a pure young girl who loved a man of bad habits. He was handsome and popular, and although she might have done much better, in defiance of her mother's counsel and her own better judgment she married him. But was the suffering any less keen to this proud-spirited girl when she had to search for him from one saloon to another at last to find him helpless from drink and then to get him loaded in the wagon and drive home through the dark night with her once proud lover lying dead drunk in the back of the wagon? Was it any easier or was she happy because she once loved him? What is a sadder sight than a man, who would otherwise have been honorable, being dragged down by his wife?

I want to say to the young people who still have the making of their future in their hands. Do not take the final step until you are sure that your love is founded on virtue and honor. Far better to live independent and single than to share the wretchedness of a dissolute companion.

HERMONA.

SHORT STOPS.

Exit, writes: I want to warn farmers and their wives against going in debt. It has ruined at least one family of my acquaintance. They had expensive tastes but not the means to carry them out on a cash basis so they did so on the credit system. They followed this as long as possible, then had to do without. Debts have accumulated to such an extent that no one will trust them any more, so they are struggling to pay interest and keep up appearances these hard times. How much better it would have been to buy only what could be paid for. Then the future years would have no terrors. Even self-denial is commendable to this end, for one gains in self-respect if they do not dress quite so fine. I always think about the ant and the cricket. When winter came the ant had stores provided for his use, but the foolish cricket had idled away the summer hours and had nothing. I hope no young couple who are just starting in life will be afraid to say that they will not live beyond their means. Pay as you go or don't go, is a very good motto. This may come pretty hard sometimes, but will be much better in the end.

Mrs. S. G. W. writes: I am a

stranger to you all, but you are not strangers to me. I have been reading your articles with deep interest for a long time. I send a recipe for old fashioned molasses cake, as Bitter Sweet asked for one, also one for excellent ginger cookies. (See contributed recipes.—Ed.) Some time ago a lady asked something about laying out a flower bed and as it is now time to make beds for fall bulbs I would like to say that the nicest frame for flower beds which I have found is a wide tire from a "truck" wagon. It never gets out of place. The lady who complained that her jonquils do not bloom at two years should have patience. Mine bloomed last spring for the first time in four years. I think they are like lilies; the ground wants forking over in the fall and enriching, not disturbing it in the spring.

TO PRESERVE PLUMS.

Take fine ripe blue plums, weigh them, and to each pound allow a pound and a half of loaf sugar. Put them into a pan and scald them with boiling water to make the skins come off easily. Peel them, and throw them as you do so into a large pitcher. Let them stand for two hours, and then take them out, saving all the juice that has exuded from them while in the pitcher. Spread the plums out on large dishes and cover them with half the sugar you have allotted to them (it must be previously powdered) and let them lie in it all night. Next morning pour the juice out of the pitcher into a porcelain preserving kettle, add the last half of the sugar to it and let it melt over the fire. When it has boiled, skim it, and then put in the plums. Boil them over a moderate fire for about half an hour; then take them out one by one and spread them on flat dishes to cool. If the syrup is not thick and clear enough, boil and skim it a little longer until it is thick. Put the plums into glass jars and pour the syrup warm over them.

The flavor will be much improved by boiling in the syrup with the fruit a handful of the kernels of the plums, blanched in scalding water and broken in half. Take the kernels out of the syrup before putting it into the jars. Tie the jars down with thick paper.

ILKA.

A number of letters have been received during the past week upon the hired girl subject. These are from both employer and employe, and the general opinion seems to be that while the mistress might not be willing to exchange places with the maid, yet if a girl has to work for her living it may as well be in a good family, where she is kindly treated, as behind a counter or in some shop. Her wages are as much on an average as she would receive as shop girl after paying board and washing, and if the girl works in a farmer's family the chances are she will have more money to spend as she pleases than will her mistress.

CONTRIBUTED RECIPES.

Green Tomato Hash.—Three pecks green tomatoes, one dozen large onions, six green peppers, three large bunches celery. Chop all very fine and mix. Sprinkle with one pint salt and let stand over night. Drain off all brine and cover with vinegar. If very strong this may be one-fourth water. Cook in this very slowly one hour then drain and pack down solidly in a jar. Now take two pounds brown sugar, two tablespoons ground cinnamon, one of allspice, one of cloves, one of black pepper (all ground), one-half cup mustard and a pint of grated horse-radish root with vinegar to make quite thin. Pour this boiling hot over the contents of the jar and it is ready for use. It will keep a year in perfect condition.

J. L. C.

Molasses Cake.—One half cup sugar, one-half cup molasses, one and one-half cups flour, one egg, one tablespoon ginger. Mix thoroughly and add two tablespoons melted butter, one even teaspoonful soda, one-half cup hot water or coffee.

Ginger Cookies.—One cup sugar, one of molasses, one of shortening, two-thirds cup boiling water, one egg, one tablespoonful each of ginger and soda, one teaspoonful each of cream tartar and salt. Mix soft.

Brighton. MRS. S. G. W.

Molasses Layer Cake.—One egg, one-half cup molasses, one-half cup sugar, two-thirds cup sour milk, one-half cup

shortening, one-half teaspoon soda, and cinnamon and cloves to taste. Stir quite stiff with flour and bake in layers. Put together with a frosting made by boiling two-thirds cup sugar with six teaspoonfuls water until it spins a thread, then pour over the beaten white of an egg, and beat till cold. Very nice.

ELIZABETH ANN.

Mrs. G. W. J. writes the Household that red ants may be got rid of by filling a bowl half full of sweetened vinegar, laying a paper over the top and placing where they are thickest. This traps them by the hundred and they will not molest anything else. Probably black ants would like this tempting bait, too.

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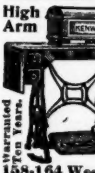
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Legal Department.

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Signature of Wife Not Necessary to Chattel Mortgage of Growing Crop.—Subscriber, Tuscola Co., Mich.—Please tell me whether wife's signature is necessary to chattel mortgage given on growing crops in security for interest?—Wife's signature is not necessary. In order to be subject to chattel mortgage crops must have a substantial existence at time of execution of the mortgage.

Mortgagor Responsible for Payment of Mortgage Whether Lands Bring Amount of or Not, in Case There is a Covenant to Pay.—E. J. B.—If a man buys a piece of property and gives a mortgage on the property and then gets money of his wife and gives another mortgage to her on the property, and then sells the property to a third party, and the third party remortgages to those same parties and after a while the one that holds the first mortgage takes the property, can the one that holds the second mortgage collect their notes of the third party, as the notes become due?—The above situation is this: The third party has given two mortgages on his property, who on foreclosure only pays the first; is he still responsible for the second mortgage? He is personally responsible for the second mortgage in case the mortgage recites a promise to pay that amount, or is accompanied by a bond or note promising such payment. Mortgages are usually drawn that way, though forms in use years ago limited the liability of the mortgagor to the land mortgaged.

Parent and Child—Liability of Parent for Tort of Child—Liability for Support.—C. U. W., Tecumseh, Mich.—1. Is the parent, as such, responsible for the child's tort, not done in the course of parent's business?—No. 2. State general rule as to parent's liability.—The general rule is that a father is not liable for the torts of his minor child; but this rule does not extend to cases where the tort is committed by child while engaging in the father's service, or work directed by father, or in doing work authorized or commanded by him. This is the general rule except in Louisiana, where the father is liable unless he was unable to prevent the tort. 3. A, the fifteen-year-old son of B, carelessly runs into C with a bicycle and injures him. A is riding for his own pleasure. Can C recover damages from B?—No. 4. Is the parent, as such, responsible on child's contract except for necessities? State general rule.—The parent is bound in law to support his child until it becomes of age, or by peculiar circumstances the parent is released from his obligation. Such support includes such necessities, only, as are in keeping with the social position of the parent. 5. A, infant son of B, who is in poor circumstances, buys on credit a gold watch and chain. Can vendor recover of B, the value of same?—No.

Right to Remove Fruit Trees.—R. F. G., Coopersville, Mich.—Give the law, quoted literally from the book, state what section and page, and in what complication, etc., on the following question: A bought land of B in 1885. B measured off the amount with A's help. A demanded to know whether the lines were properly run and B refused until A would pay part of the survey bill. In July '97 the survey was made, A and B paying equal shares, and the line as found cuts on A's land and takes in some of his peach trees, currant bushes and huckleberries, all recently planted. Can A, at present, or at proper season for removing, transplant any or all of his bushes or trees?—Judge Campbell, in a decision by the Supreme Court on April 21, 1874, found in Michigan Reports, vol. 29, page 222, in the case of Reed vs. Drake, where the plaintiff freed certain peach trees from his freehold, after a former survey had been found incorrect, held "The defendant, being in a possession which was taken by joint consent as his rightful possession under his deed, has merely removed what he placed there for his use and advantage. It would be difficult to find a plainer case. He has done nothing which was

not within the direct intent of his grantor when he was put in possession. He has not removed what he found already there, but what was placed there after his purchase with his grantor's aid as well as consent. * * * His actual possession was measured by their joint action, and was notice to the plaintiff of the extent of his claim." This is an annotated case and may shed light on some questions probably involved but not asked by you. No notice is necessary; removal may be made in proper season. If B forbids, take the trees anyway and let him discover his remedy.

The Markets.

WHEAT.

The market has been very unsettled all week, and shows a decline; but the situation seems to be as strong, or even stronger, than at any time within a month. There is no doubt now of a great shortage in the wheat and rye crops of Europe, and that the wheat crops of India, Argentina and Australia are also short. Russia and the United States and Canada are relied upon to furnish all deficiencies, and it looks to us as if we could dictate prices for the entire crop year. But dealers are very nervous, and cannot believe that present prices can continue. It is only lack of confidence that keeps values weak.

The following table exhibits the daily closing sales of spot wheat in this market from August 25 to September 16, inclusive:

	No. 1	No. 2	No. 3
	White.	Red.	Red.
Aug. 25.....	96 1/2	97 1/2	95 1/2
" 26.....	98	98	96
" 27.....	94	94	92
" 28.....	93 1/2	93 1/2	91 1/2
" 29.....	91 1/2	91 1/2	89 1/2
" 30.....	92	92	90
Sept. 1.....	92 1/2	92 1/2	90 1/2
" 2.....	96	96 1/2	94 1/2
" 3.....	93 1/2	94	92
" 4.....	94 1/2	94 1/2	92 1/2
" 5.....	97	97 1/2	95 1/2
" 6.....	97 1/2	97 1/2	95 1/2
" 7.....	98 1/2	98 1/2	96 1/2
" 8.....	98 1/2	99 1/2	97 1/2
" 9.....	96 1/2	97	95
" 10.....	93 1/2	94 1/2	92 1/2
" 11.....	94 1/2	95 1/2	93 1/2
" 12.....	94	95 1/2	93 1/2
" 13.....	93	94 1/2	92
" 14.....	93	94 1/2	92
" 15.....	93	94 1/2	92
" 16.....	93	94 1/2	92

The following is a record of the closing prices on the various deals in futures each day during the past week:

	Sept.	Dec.
Friday.....	99 1/4	99 1/2
Saturday.....	97	97 1/2
Monday.....	94 1/2	95 1/2
Tuesday.....	95 1/2	96
Wednesday.....	95 1/2	96
Thursday.....	94 1/2	95

The visible supply of wheat on Saturday last in the United States and Canada was 15,786,000 bu., as compared with 14,317,000 bu. the previous week, and 47,802,000 bu. at the corresponding date last year. The increase for the week was 949,000 bu.

Locusts are reported to have attacked the Argentine wheat crop.

This is the way Henry Clews sums up the situation: America is long of crops and short of troubles, whereas Europe is short of crops and long of troubles.

Stocks of wheat in the chief Argentine ports on September 4 were 160,000 bu., against 848,000 bu. one year previous. Stocks of corn 400,000 bu., against 2,760,000 bu. one year ago.

The French official report makes the wheat crop 248,000,000 bu., and estimates that imports will be at the very least 80,000,000 bu. Last season her imports were practically nothing.

Bradstreet's reports an increase east of the Rockies last week of 1,900,000 bu., and in Europe of 3,800,000 bu., a total of 5,700,000 bu., a third more than expected, and this caused the break in prices.

The Corn Trade News of September 4 says: "Our correspondent at Buenos Ayres cables that crop prospects are favorable, general heavy rains having fallen."

Dealers in wheat in this country, especially at the great centers, are yet slow to believe in the conditions that have advanced our prices and many of them are especially skeptical of the late appreciation above 90c. But while 90c about represents what we thought was a pivotal price two weeks ago the conditions abroad which underlie our values seem to be emphasized from week to week by renewed statements of crop losses abroad. What the use in fighting it? Why not cheerfully lend a hand to maintain our position as arbiters of wheat prices around the world? Everybody is standing in mortal fear of the northwest movement. It may be large, but it is September 8, and no increase but a decrease to stocks in store since July 1. A little more confidence and the market will take all the wheat that is offered. Brace up!—Toledo Market Report.

DAIRY PRODUCTS.

BUTTER.

There has not been much change in the market since a week ago, but what there has shows a tendency to greater firmness. The weakness noticed in the New York market has passed away. The Detroit market shows little change, except that the increased receipts of ordinary stock have led to some accumulation, and may lead to a break in prices if kept up. Quotations in this market are as follows: Creamery, 17@18c; fancy dairy, 14@15c; fair to good dairy, 12@14c; low grades, 6@9c per lb. At Chicago there has been some improvement, and all offerings of fresh butter for sale to good quality are readily taken. Quotations in that market on Thursday were as follows: Creameries, extras, 17 1/2c; firsts, 16@17c; seconds,

12@14c. Dairies, extras, 15c; firsts, 12@13c; seconds, 10@11c. Packing stock, fresh, 8@9c. The New York market shows a decided improvement in tone since a week ago, although values have not appreciated. Extra fine creamery, fresh made, commands 1/4@1/2c more than current quotations, as it is not being received in sufficient quantities to meet demand. Quotations in that market on Thursday were as follows: Creamery, Western extras, per lb., 18c; do firsts, 16@17c; do thirds to seconds, 12 1/2@15c; do State, extras, 17 1/2@18c; do thirds to firsts, 12 1/2@17c; do June make, extras, 17 1/2c; do seconds to firsts, 15@17c; State dairy, half-firkin tubs, extras, 16@16 1/2c; do Welsh tubs, fancy, 16c; dairy tubs, thirds to firsts, 10 1/2@14 1/2c; State dairy, tins, etc., 10 1/2@14c; imitation creamery, fine, 13@13 1/2c; do seconds to firsts, 11@12 1/2c; factory, fresh, firsts, 11 1/2c; do seconds, 10 1/2@11c; low grades, 8 1/2@10c.

At the Utica Board on Monday last 90 packages of butter were sold at a range of 18 1/2@19 1/2c per lb. Last week the range was 19 1/2@20c.

At Little Falls on Monday only 23 packages of dairy were sold, at a range of 15@16c per lb. Last week the range of prices was 16@18c.

CHEESE.

While other markets are not in a very satisfactory position at present, this market has held steady, with an upward tendency in values. Quotations are now 9 1/2@10c for the best full cream State. At Chicago the market is slow owing to a lessened demand from southern shippers, and the result is seen in the lower quotations, which were as follows on Thursday: Young Americas, 7 1/2@8 1/2c; twins, 7 1/2@8c; cheddars, 7@8 1/2c; Swiss, 8@9 1/2c; Limburger, 5 1/2@7 1/2c; brick, 7 1/2@8 1/2c. The New York market has been in an unsatisfactory position most of the past week, but on Tuesday, with continued light receipts and a slight improvement in the foreign demand, the market became stronger, and closed firm on Thursday at the following range: State, full cream, large, fancy colored or white, 9 1/2c; do choice, 9c; do fair to good, 8 1/2@8 3/4c; do common, 7 1/2@8c; do small, colored, fancy, 9 1/4@9 1/2c; do white, 9 1/2c; do choice, 8 1/2@9c; do common to good, 7 1/2@8 1/2c; light skims, small, choice, 7 1/4@7 1/2c; do large, 6 1/2@7c; part skims, small, choice, 6 1/2@7c; do large, 6 1/4@6 1/2c; do good to prime, 5 1/2@6c; do common to fair, 4 1/2@5c; full skims, 3 1/2@4c.

At the Utica Board on Monday 8,896 boxes were sold at 8 1/2@9c; the previous week 619 boxes were sold at a range of 8 1/2c, and on the same day a year ago 4,954 boxes were sold at an average price of 8 1/2@9 1/2c.

At Little Falls on Monday 5,155 boxes were sold at a range of 8 1/2@9 1/2c. The previous week 4,376 boxes were sold at a range of 8 1/2@9c.

At Liverpool on Thursday the finest white and colored American cheese sold at 45s per cwt., the same price as quoted a week ago.

DETROIT PRODUCE MARKET.

Detroit, September 16, 1897.

FLOUR.—Quotations on jobbers lots in barrels are as follows:
Straights.....\$5.00
Clears.....4.75
Patent Michigan.....5.50
Low grade.....4.00
Rye.....3.50

CORN.—The visible supply of this grain on Saturday last in the United States and Canada was 33,604,000 bu., as compared with 31,220,000 bu. the previous week, and 13,007,000 bu. at the corresponding date in 1896. Quoted as follows: No. 2, 31 1/2c; No. 3, 31c; No. 2 yellow, 32c; No. 3 yellow, 31c per bu.

OATS.—The visible supply of this grain in the United States and Canada on Saturday last was 9,701,000 bu., as compared with 9,543,000 bu. the previous week, and 8,073,000 bu. at the corresponding date in 1896. Quotations are as follows: No. 2 white, 23 1/2c; No. 3 white, 22 1/2c; light mixed, 22 1/2c per bu.

RYE.—The visible supply of this grain on Saturday last in the United States and Canada was 2,349,000 bu., as compared with 2,284,000 bu. the previous week, and 1,777,000 bu. at the corresponding date in 1896. No. 2 closed Thursday at 49 1/2c. Market steady.

CLOVER SEED.—Prime, \$3.50; October delivery, \$3.50 per bu; No. 2 quoted at \$3.30@3.40 per bu; alsike, \$4@5.25, according to quality.

FEEB.—Jobbing quotations on carload lots are as follows: Bran and coarse middlings, \$10; fine middlings, \$12; cracked corn, \$13; \$11 per ton.

BUTTER.—Creamery, 17@18c; fancy dairy, 14 1/2@15c; good dairy, 12@13c; low grades, 6@9c per lb.

CHEESE.—Michigan full cream, 9@10 1/2c per lb.

POULTRY.—Live spring chickens, 7@7 1/2c; fowls, 6@6 1/2c; ducks, 7 1/2c; turkeys, 8c per lb.

EGGS.—Fresh receipts, 14@14 1/2c per doz.
GAME.—Jack snipe, \$1.50 per doz; golden plovers, \$1.50 per doz; ducks, per pair, canvasbacks, \$1@1.50; mallards, 50@60c; red-heads, 50@60c; bluebills, 25c; wild geese, 50c each.

CABBAGES.—Quoted at \$3.50 per hundred.

APPLES.—New, \$1.50@2.25 per bbl for good stock.

PLUMS.—Good fruit, \$1@1.25 per bu; fancy, \$1.50 per bu.

PEARS.—Common varieties, 70@75c; Bartlett's, 85@90c per bu.

PEACHES.—New York Crawfords, 60@65c per 1-3 bu basket; Michigan, \$1.50@1.75 per bu.

GRAPES.—Niagara, 20c; Concord and Wines, 18@20c; Delaware, 25@30c per basket.

MELONS.—Watermelons, \$7@10 per 100; nutmegs, 50c per bu; osage, \$1 per crate.

TOMATOES.—Quoted at \$25@35c per bu.
POTATOES.—Michigan quoted at 35@40c per bu. A good deal of the receipts are of very poor quality.

BEANS.—City hand-picked quoted at \$1@1.05 per bu in car-load lots.
DRIED FRUITS.—Evaporated apples, 4 1/2@5c; evaporated peaches, 7 1/2c; dried apples, 3c per lb.
HONEY.—Quoted at 10@12c in sections for white, and 8@9c for dark comb; extracted, 5@6c per lb.
PROVISIONS.—Mess pork, \$10 per bbl; 100 lbs. 100c; 100 lbs. 100c; 100 lbs. 100c.

10.75; compound lard, 4 1/2c; family lard, 5 1/2c; kettle lard, 6 1/2c; smoked hams, 9@10c; bacon, 8 1/2@9 1/2c; shoulders, 6 1/2c; picnic hams, 7 1/2c; extra mess beef, \$7.50; plate beef, \$8.25.

COFFEE.—City prices are as follows: Rio, roasting, 15c; fair, 16c; good, 18@19c; prime, 20c; choice, 22@23c; fancy, 24c; Maracaibo, roasted, 25c; Santos, roasted, 24c; Mocha, roasted, 25c; Java, 29c.

OILS.—Raw linseed, 39c; boiled linseed, 41c per gal less 1c for cash in ten days; extra lard oil, 48c; No. 1 lard oil, 35c; water white kerosene, 8 1/2c; fancy grade, 11 1/2c; deodorized stove gasoline, 7 1/2c; turpentine, 35 1/2c per gal in bbl lots; in less quantities, 40@42c per gal.

HARDWARE.—Latest quotations are as follows: Wire nails, \$1.60; steel cut nails, \$1.55 per cwt, new card; axes, single bit, bronze, \$5; double bit, bronze, \$8.50; single bit, solid steel, \$4; double bit, solid steel, \$3.50 per doz; bar iron, \$1.40; carriage bolts, 75 per cent off list; painted bar wire, \$1.65; galvanized do, \$1.95 per cwt; single and double strength glass, 60 and 20 per cent off list; sheet iron, No. 24, \$2.50 per cwt; galvanized, 75 and 10 per cent off list; No. 1 annealed wire, \$1.45 rates.

HAY.—Baled quoted as follows: Best new timothy in car lots, \$3.50; rye straw, \$5.50; wheat and oat straw, \$4.50 per ton.

HIDES.—No. 1 green, 7c; No. 1 cured, 9c; No. 2 green, 6c; No. 1 cured calf, 10 1/2@11c; No. 2 cured calf, 9@9 1/2c; No. 1 green calf, 9c; No. 2 green calf, 7 1/2c per lb; sheepskins, as to wool, 50@75c; shearings, 20@35c.

WOOL.—Unwashed fine, 14@15c; unwashed medium, 17@18c; washed fine, 17@18c; washed medium, 21@22c per lb.

DETROIT LIVE STOCK MARKET.

Michigan Central Stock Yards.

Detroit, Mich., Sept. 16, 1897.

CATTLE.

Receipts Thursday 369 head, as compared with 623 one week ago. There is no change to note in quality. Market active; good handy butchers' and good stockers steady; common and coarse thin butchers' and stockers slow and weak to shade lower. \$4.50 was highest price paid for 4 good steers av. 1,067 lbs., and \$4.30 for 3 do av. 1,116 lbs., but the bulk changed hands at prices ranging from \$3 to \$4; canners and common to fair butchers, \$1.50@2.95; bulls, light to good butchers, \$2.50@3.00; feeders and stockers, \$3@4. Veal calves.—Receipts, 47; one week ago, 112; active and 50c per 100 lbs. higher. Sales at \$5.25@6.50 per 100 lbs. There is a good demand for milch cows and springers at prices ranging from \$30.00@50.00 each, mostly \$30@45.00.

Glenn sold Mich Beef Co a fat cow weighing 1,350 at \$3.50, 2 common do av. 966 at \$2.00 and 3 steers av. 1,116 at \$4.30.

Ackley sold same 5 mixed butchers av. 1,104 at \$3.30 and a bull weighing 1,150 at \$2.75.

Patrick & Pline sold Bird 7 stockers av. 683 at \$3.60.

Sharp sold Mich Beef Co a bull weighing 1,500 at \$3.00, 1 do weighing 800 at \$2.75 and 1 mixed butchers av. 850 at \$2.75.

R Ramsey sold same 20 mixed butchers av. 805 at \$3.40.

Bunnell sold same 2 mixed butchers av. 975 at \$3.40.

Denn's sold Caplis & Co a canner weighing 890 at \$1.50, 2 fat heifers av. 785 at \$4, 10 mixed butchers av. 1,041 at \$3 and 5 do av. 752 at \$3.60.

Lamoureux sold Kammen a cow weighing 1,025 at \$2.50 and 2 mixed butchers av. 680 at \$3.65.

Spicer & M sold Moore a fat cow weighing 1,010 at \$3.25 and 2 steers to Russell av. 890 at \$3.85.

Patrick & Pline sold Russell a bull weighing 810 at \$2.80 and 3 steers av. 925 at \$3.85.

J Stephens sold Grusel 8 stockers av. 558 at \$3.60.

Ramsey sold Monaghan 4 cows av. 850 at \$2.60 and 2 heifers av. 481 at \$3.00; also 4 light heifers to Stucker av. 457 at \$2.90.

S Georgia sold Cook & Fry a fat cow weighing 960 at \$3.25 and 5 mixed butchers av. 796 at \$3.50.

Vanbuskirk sold Mich Beef Co 3 steers av. 853 at \$4.00, 2 mixed butchers av. 675 at \$3.25 and 2 bulls av. 715 at \$2.75.

Patrick & Pline sold David 4 stockers av. 632 at \$3.40.

Stephens sold Mich Beef Co 9 (cows and bulls) av. 984 at \$2.85.

Patrick sold Marx a fat cow weighing 1120 at \$3.00 and 3 mixed butchers av. 618 at \$3.25.

Dillon sold Mich Beef Co 7 heifers av. 725 at \$3.70; 5 steers to Sullivan av. 680 at \$3.65 and a cow to Black weighing 1020 at \$2.50.

Spicer & M sold Wiles 2 steers av. 839 at \$3.80; 2 stockers to Driscoll av. 635 at \$3.70 and 2 do to Haselbach av. 440 at \$3.50.

Georgia sold David 8 stockers av. 510 at \$3.40.

Spicer & M sold Black 5 mixed butchers av. 928 at \$3.40 and a heifer weighing 920 at \$3.85; 5 fair butcher cows to Mich Beef Co av. 1,030 at \$2.70 and 1 mixed butchers to Cook & Fry av. 165 at \$3.35.

John Dillon sold Black 6 mixed butchers av. 965 at \$3.50 and 3 cows av. 1,125 at \$3.00; also 3 mixed stockers to Sullivan av. 583 at \$3.25.

York sold Caplis & Co 8 cows av. 977 at \$2.75.

Roer & Holmes sold Mich Beef Co 4 steers av. 1067 at \$4.50 and 2 bulls av. 1020 at \$2.75; to Robinson 9 steers and heifers av. 824 at \$3.80; 2 cows av. 940 at \$3.60; 6 calves av. 366 at \$4.00; 9 mixed av. 784 at \$3.25 and 2 do av. 830 at \$2.75; to Cook & Fry 8 mixed butchers av. 823 at \$3.60; 2 stockers to Carmichael av. 515 at \$3.60 and 2 do av. 650 at \$2.70.

SHEEP AND LAMBS.

Receipts Thursday, 1,130; one week ago, 1,651. Market active; lambs sold 10 to 15c, and yearlings and good mixed lots 10c higher. All sold early, closing firm. Range of prices: Good lambs, \$5.00 to \$5.25; fair to good, \$4.50 to \$4.80; yearlings and good mixed lots, \$4.40 to \$4.75; fair to good mixed butchers, \$3.35 to \$4.35.

Roe & Holmes sold Robinson 24 mixed av. 75 at \$4.50.

Lamoureux sold McIntyre 14 most lambs av. 63 at \$4.50 and 4 av. 75 at \$4.00.

Smith sold Mich Beef Co 35 mixed butchers av. 71 at \$3.50.

Bunnell sold Sullivan Beef Co 7 lambs av. 61 at \$4.75.

Stephens sold Mich Beef Co 62 mixed av 80 at \$4.40.
 Dennis sold Hiser 12 lambs av 81 at \$5.12.
 Sprague sold Sullivan Beef Co 12 mixed butchers av 96 at \$3.35.
 Georgia sold Young 29 lambs av 77 at \$5.00.
 Coates sold Fitzpatrick 76 lambs av 77 at \$5.25 and 7 av 58 at \$4.00.
 Sharp sold Sullivan Beef Co 19 mixed av 90 at \$4.40.
 Horns sold Fitzpatrick 17 av 70 at \$5.00.
 Clark & B sold Mich Beef Co 55 lambs av 71 at \$5.05 and 11 mixed av 88 at \$3.75.
 Spicer & M sold Downs 97 lambs av 87 at \$5.00.
 Haley sold same 69 most lambs av 76 at \$4.75.
 Pinkney sold Hammond, S & Co 25 mixed av 81 at \$3.50.
 Johnston sold Downs 94 lambs av 77 at \$5.00.
 VanBuskirk sold same 24 lambs av 65 at \$5.10.
 Roe & Holmes sold Hammond, S & Co 41 lambs av 60 at \$5.10.
 Rowlater sold Bird 50 most lambs av 66 at \$4.50.
 Spicer & M sold Mich Beef Co 44 lambs av 65 at \$4.85 and 7 mixed av 88 at \$3.85.
 Rowlater sold Downs 155 lambs av 71 at \$5.25.

HOGS.

Receipts Thursday, 1,981; as compared with 3,243 one week ago. Market opened slow, later trade was active at prices ranging from \$4.15 to \$4.20. One bunch of choice 190-lb. hogs brought \$4.22; stage, 1-3 off; roughs, \$3.40 to \$3.75; heavy, \$4.10 to \$4.25. All sold, losing firm.
 Coates sold Sullivan 15 av 100 at \$4.20.
 Roe & Holmes sold same 59 av 143 and 42 av 147 at \$4.20.
 Johnston sold same 15 av 172 \$4.15.
 Rowlater sold same 122 av 165 and 136 av 180 at \$4.20.
 Holmes sold R S Webb 10 av 180 at \$4.15.
 Smith sold same 54 av 190 at \$4.22.
 Bunnell sold same 55 av 170 at \$4.20.
 Clark & B sold same 24 av 180 at \$4.20.
 Spencer sold same 69 av 184 at \$4.20.
 Johnston sold same 40 av 171 at \$4.20.
 Messmore sold same 64 av 210 at \$4.20.
 VanBuskirk sold Parker, Webb & Co 51 av 175 at \$4.15.
 Horne sold same 73 av 200 at \$4.15.
 Ackley sold same 60 av 203 at \$4.15.
 Lamson sold same 60 av 227 at \$4.17.
 Lamoreaux sold same 34 av 190 at \$4.15.
 Henderson sold same 39 av 190 at \$4.15.
 Osmus sold same 17 av 203 at \$4.17.
 Spicer & M sold same 22 av 205, 20 av 180 and 19 av 221 at \$4.17, and 47 to Sullivan at \$4.15.
 Dennis sold Hammond, S Co 57 av 198, 92 av 230 at \$4.17.
 Hogan sold same 58 av 224 at \$4.17.
 Sharp sold same 76 av 180 at \$4.17.
 Pinkney sold same 14 av 209 at \$4.15.
 Roe & Holmes sold same 64 av 202 and 17 av 196 at \$4.17.
 Glenn sold same 52 av 210 at \$4.15.
 Horne sold same 81 av 195 at \$4.15.
 Roe & Holmes sold same 15 av 173 and 25 av 172 at \$4.17.

OUR BUFFALO LETTER.

East Buffalo, Sept. 19, 1897.

Cattle.—Receipts of cattle on Monday last were 6,292, as compared with 6,485 the same day the previous week, and shipments were 4,202, as compared with 4,796 for the same day the previous week. The market opened on Monday active and strong, with some grades a shade higher, but slow and barely steady for fat heavy stock, which was in very light demand. The receipts were generally of poorer quality than usual. Receipts of stockers and feeders were large, and they sold lower in consequence except a few choice ones which showed good breeding. The same conditions have ruled in the market since Monday, prime well finished steers holding steady to firm. Milch cows are lower, as are veal calves. Quotations at the close on Wednesday were as follows: Export and Shipping Steers.—Prime to extra choice finished steers 1,250 to 1,400 lbs., \$5.15 to \$5.35; prime to choice steers 1,200 to 1,400 lbs., \$5.00 to \$5.10; good to choice fat steers 1,200 to 1,400 lbs., \$4.75 to \$4.95; good to choice fat smooth steers 1,100 to 1,200 lbs., \$4.60 to \$4.75; green coarse and rough fat steers 1,100 to 1,350 lbs., \$3.75 to \$4.40. Butchers Native Cattle.—Fat smooth dry fed steers 1,000 to 1,150 lbs., \$4.50 to \$4.75; fat smooth dry fed light steers 900 to 1,000 lbs., \$4.25 to \$4.50; green steers thin to half fattened 1,000 to 1,400 lbs., \$3.75 to \$4.35; fair to good steers, 900 to 1,000 lbs., \$3.90 to \$4.30; Texas steers, \$3.75 to \$4.20; choice smooth fat heifers, \$4.25 to \$4.50; fair to good fat heifers, \$3.40 to \$4.00; light thin half fat heifers, \$3.10 to \$3.35; good smooth well fattened butcher cows, \$3.75 to \$4.00; fair to good butcher cows, \$3.00 to \$3.50; common old shelly cows, \$2.00 to \$2.50. Native Stockers, Feeders, Bulls and Oxen.—Feeding steers, good style, weight and quality, \$3.65 to \$4.00; feeding steers common to only fair, \$3.25 to \$3.50; good quality yearling stock steers, \$3.80 to \$4.15; stock heifers common to choice, \$2.90 to \$3.40; stock steers cull grades and throw outs, \$3.00 to \$3.15; export weight bulls, fat and smooth, \$3.65 to \$4.00; good fat smooth butchers bulls, \$3.25 to \$3.50; fair to good sausage bulls, \$2.65 to \$3.10; thin, old and common bulls, \$2.50 to \$2.60; stock bulls, \$2.50 to \$3.00; fat smooth young oxen, to good lots fit to export, \$4.00 to \$4.60; fair to fairly good partly fattened young oxen, \$3.75 to \$4.25; old common and poor oxen, \$2.25 to \$3.50. Milkers and Springers.—Milkers strictly fancy, \$46.00 to \$50.00; milkers good to choice, \$36.00 to \$43.00; milkers fair to good, \$28.00 to \$32.00; milkers poor to fair, \$18.00 to \$25.00; springers strictly fancy, \$42.00 to \$48.00; springers fair to good quality, \$30.00 to \$40.00; common milkers and springers, \$14.00 to \$25.00. Veal Calves.—Veals choice to extra, \$7.25 to \$7.50; veals good to choice, \$6.75 to \$7.00; veal calves common to fair, \$5.25 to \$6.50; heavy fed and buttermilk calves as to quality, \$3.50 to \$5.00.

Thursday cattle were reported steady and unchanged, with veal calves lower. Sheep and Lambs.—Receipts, Monday, were 12,800, as compared with 15,400 the previous Monday; shipments were 8,000, as compared with 9,800 same day the previous week. On Monday the market opened with sheep in light supply and steady to firm, while lambs were slow and 10 to 15c lower, the best grades showing the most decline. Since Monday the market has improved, and sheep, owing to scarcity, were strong, and lambs showed an advance.

The quality of the lambs offered was very fair. Quotations at the close on Wednesday were as follows: Native Yearling Lambs.—Good to choice, \$4.50 to \$4.75; fair to good 65 to 70 lbs., \$4.25 to \$4.50; common to good culls, \$3.75 to \$4.15; export yearlings 95 to 110 lbs., \$4.00 to \$4.50. Spring Lambs.—Choice to fancy 75 to 80 lbs., \$5.00 to \$5.55; fair to good, \$4.50 to \$5.50; common, \$4.25 to \$4.35; common skinnier culls, \$3.25 to \$4.00. Native Sheep.—Prime to fancy wethers, \$4.50 to \$4.65; good to choice handy sheep, \$4.25 to \$4.50; common to fair, \$3.75 to \$4.15; culls and common, \$2.50 to \$3.50; good to extra heavy export clipped mixed sheep to prime weight quotable, \$3.75 to \$4.50.

On Thursday the market was steady for good sheep but easier for lambs. A few fancy lambs sold up to \$5.85 to \$6.00, but the bulk of the sales were at \$5.50 to \$5.75. Hogs.—Receipts of hogs on Monday last were 20,500 as compared with 30,210 for the same day the previous week; and shipments were 13,450 as compared with 18,620 for the same day the previous week. While the receipts were only moderate on Monday, the market ruled dull, irregular and lower for all kinds, but all were sold at the close. Since Monday there has been no improvement in the situation, and we note a decline of 5c in medium weights, while Yorkers were barely steady. Michigan is sending a good many grassy hogs forward, as is Ohio, and they do not help the market. Quotations at the close on Wednesday were as follows: Good to choice light medium grades 160 to 180 lbs., \$4.45 to \$4.50; good to choice pigs and light Yorkers, 125 to 150 lbs., \$4.50; mixed packing grades 180 to 200 lbs., \$4.40 to \$4.45; fair to best medium weight 210 to 230 lbs., \$4.40 to \$4.45; good to prime heavy hogs of 270 to 300 lbs., \$4.35 to \$4.45; fair to good fat fed grades ends and grassy hogs, \$4.15 to \$4.25; roughs common to good, \$3.50 to \$3.85; stags common to good, \$2.75 to \$3.25; pigs light 105 to 120 lbs. good to prime corn fed lots, \$4.25 to \$4.50; pigs thin to fair light weight 75 to 100 lbs., \$3.75 to \$4.00; pigs, skips and common light and undesirable lots, \$3.00 to \$3.50.

On Thursday the market for hogs was slow at unchanged prices for mediums and heavy, but stronger for Yorkers. Sales of the latter were at \$4.50 to \$4.55, and pigs at \$4.25 to \$4.45.

CHICAGO.

Union Stock Yards, September 16, 1897.

Cattle.—Receipts for last week were 62,360 head, as compared with 59,600 the previous week, and 59,223 for the corresponding week in 1896. Up to and including Wednesday of this week receipts have been 48,476 head, as compared with 46,793 for the same days last week. On Monday trade opened rather slow, but improved as the day advanced, and closed firm at about the same range of values as at the close of the week. There was more of a display of fair to good native steers than for a month past; none were downright poor and none bad. A large number sold between \$5 and \$5.25, and one lot as high as \$5.50. Since Monday the market has ruled rather slow, although the receipts of good cattle have declined 10 to 15c since Monday, and western grass cattle about the same. Native butchers' stock and prime steers are about even with last week. On Wednesday one lot of extra steers, averaging 1,675, sold at \$5.75. Quotations on that day ranged as follows: Ordinary fair to prime steers, \$3.75 to \$4.40; heifers, \$3.10 to \$4.25; cows, \$2.25 to \$3.50; bulls, \$2.20 to \$4.50; stockers, \$3.40 to \$4.25; veal calves, \$3.50 to \$7.00.

On Thursday estimated receipts were 10,000; market ruled weaker, with \$3.35 the top price in best steers; heifers, \$4.00 to \$4.40. Sheep and Lambs.—Receipts last week were 88,006, as compared with 75,785 for the previous week, and 75,549 for the corresponding week in 1896. Up to and including Wednesday of this week receipts have been 52,207, as compared with 55,838 for the same days last week. The week opened with business fairly active, and prime mutton sheep and feeders ruling steady to strong. Lambs were of rather poor quality, and in some instances sold easier, but this was more on account of the difference in quality than values. The top price on sheep was \$3.90, and on lambs \$5.25. Since Monday the general market ruled rather slow, with a slight downturn on medium mutton sheep and a downturn of 15 to 20c on medium lambs, while the very best barely held their own. There was a fair business in feeding sheep and lambs at steady prices. On Wednesday mutton sheep sold at \$3.50 to \$3.85, and feeders at \$3.40 to \$3.65; the \$3.40 lot were ewes. Common market lambs sold at \$4.25 to \$4.50; tops, \$5.00 to \$5.50, a few at \$5.75 to \$5.80. Feeding lambs, \$4.50 to \$4.75.

Receipts of sheep on Thursday were 14,000; market slow, but prices held steady. Hogs.—The receipts of hogs last week were 127,543, as compared with 161,171 the previous week, and 142,758 for the corresponding week in 1896. Up to and including Wednesday of this week, receipts have been 64,156, as compared with 75,371 for the same days last week. The market ruled dull and weak all day Monday, with a decline in prices of fully 10c per hundred. The difference between heavy and light hogs was very marked, light selling up to \$4.27 to \$4.30, and heavy packers up to \$4.40. Since Monday the market has been more active, but common and low grade packing sorts are selling about 5c lower than last week. On Wednesday rough and common sold at \$3.60 to \$3.70; prime heavy packers and good mixed, \$3.80 to \$4.05; bulk around \$3.90; prime mediums and butcher weights, \$4.10 to \$4.30; prime light, \$4.25 to \$4.30, a few fancy at \$4.35. The general market closed steady, with all the good hogs, either heavy, medium or light, sold, but there were a large number of the ordinary packing sorts left.

On Thursday estimated receipts of hogs were 21,000; market weak to 5c lower. Sales were at the following range: Light, \$3.90 to \$4.30; mixed, \$3.80 to \$4.27; heavy, \$3.65 to \$4.25; rough, \$3.65 to \$3.80.

The demand for feeding stock from farmers is all that holds the sheep market up at present. Dealers are looking for a big drop in prices, but may be disappointed, because all stock selling cheap is at once taken for shipment back to the farms.

NEWS SUMMARY.

Michigan.

The city water works plant at Marshall was sold at foreclosure sale last week for \$40,450.

Gov. Pingree pardoned eight criminals last Saturday and two others were released on parole.

The Michigan Banker, a magazine started about a year ago and published in Detroit, is reported to be dead.

The Michigan Commode and Cabinet Co., of Portland, began operations in their fine new building during the past week.

The Lake Odessa creamery plant burned last week. Most of the building's contents were saved. The loss is between \$3,000 and \$4,000.

Every lumber mill in Menominee is running full blast, and the activity in every branch of the lumber industry is double that of a year ago.

Frank G. Scofield, who a few years ago was a prominent carriage manufacturer in Ovid, is reported to be insane, and has been taken to Kalamazoo.

A new bank has been organized at Fenton to take the place of the old State Bank of Fenton. A number of the city's best business men are said to be interested in the new enterprise.

Kalamazoo proposes to hold its street fair October 12, 13 and 14, and the event promises to be a great success. Plans are being laid to have floral parades and Mardi Gras features. At least \$5,000 will be offered in premiums for exhibits.

Nearly a block of business buildings and several dwellings, the village hall, the jail, and the hose tower at Oscoda were destroyed by fire one morning last week. The town records were all consumed with the village hall. The loss is about \$25,000.

The big American Eagle Tobacco Co., of Detroit, has assigned to the Union Trust Co. The entire property of the company, its stock, book accounts and machinery, are turned over to the Union Trust Co., for the benefit of the creditors without reservation. The assets are estimated at \$169,000, and the liabilities at \$115,000.

General.

New cases of yellow fever are almost daily reported from points in Mississippi and Alabama.

Bernard J. Treacy, the millionaire horse breeder of Lexington, Ky., died at the city hospital in Boston, Mass., of injuries received in a fall.

Henry George, the well-known advocate of the single tax theory, is said to have recently suffered a stroke of paralysis and is confined to his home.

A cyclone swept over Port Arthur and Sabine Pass, Tex., last Sunday evening resulting in the death of six persons and the destruction of considerable property.

Dr. J. K. McClure, of Lake Forest university, has been called to the presidency of that institution to succeed Dr. John M. Coulter who resigned more than a year ago. Dr. McClure has been a trustee of the university since 1888.

Secretary Gage, of the national treasury department, has decided to change the color of the two-cent postage stamp. He has directed that all stamps of that denomination shall hereafter be colored green instead of red as now.

Disastrous railroad accidents occurred last week at Emporia, Kan., Hanson, I. T., and Newcastle, Col. At Emporia over a dozen persons were killed or burned. Seven men were killed in Indian Territory and the accident at

Newcastle resulted in the death of nine persons.

The great miners' convention convened at Columbus, O., last Saturday and the delegates voted to accept the proposition of the Pittsburg operators. If the decision thus reached is adhered to in good faith it practically ends the strike so far as Western Pennsylvania, West Virginia, Ohio and Indiana are concerned. However, on the day previous to this convention a conflict occurred at Latimer, near Hazleton, Pennsylvania, between the strikers and a band of deputies. The deputies fired upon the mob, killing a good number and wounding many. This demonstration of violence has served to once more arouse the strikers throughout the country and may result in delaying the final settlement of the strike. The conflict at Latimer was bitterly denounced by the Columbus convention and by all the labor leaders.

We call the attention of our readers to the advertisement of the American Separator Co., Bainbridge, N. Y. They publish a list of testimonials, also catalog showing fully the advantages claimed for the "American," which they will be glad to send free to any one writing them and mentioning the MICHIGAN FARMER.

FARMERS are beginning to realize that it pays to grind feed, and parties interested in this would do well to write to the Phelps & Bigelow Wind Mill Co., Kalamazoo, Mich., for information concerning their Power Wind Mills. The wind is the only power that is absolutely free and at everybody's command.

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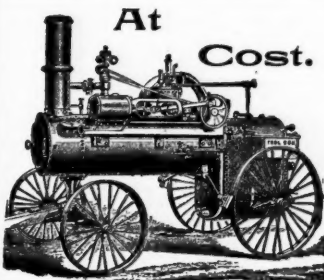
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Horticultural.

For the Michigan Farmer.
OBJECT LESSON IN FRUIT CULTURE.

On a recent visit in the southern part of the State, I had occasion to visit a prominent fruit grower, and what I saw there regarding the care of fruit was a very impressive object lesson to me. It showed what thoroughness will do in the care of fruit trees and their products.

This fruit culturist has two apple orchards, ten acres in one and fifteen acres in the other, which lie side by side upon soil, from all appearances, exactly similar.

The latter orchard is loaded with very choice fruit, consisting of Spies, Roxbury Russets and Maiden Blush, which is almost entirely free from scab and worms. The former orchard, which has the same varieties of fruit, has less than one-half as much fruit, and not near as perfect.

The orchard which contained the most and best fruit had been thoroughly cultivated during the season, and spraying with Bordeaux mixture was begun as soon as the buds began to swell, with Paris green added when the blossoms fell; this was kept up at intervals till June 15th. In fact, so thoroughly had the work been done that the trees were yet completely coated with the fungicide when I was there, August 20.

The other orchard received no cultivation, and the spraying with Bordeaux was begun too late to be of any benefit. It was there chiefly demonstrated that to avoid the scab, spraying with fungicide must be begun before it has had a chance to develop, and all subsequent applications are needed to hold this disease in check.

I found this grower busy thinning the fruit on his Blush trees, which was being carefully sorted and packed for shipment. His firsts, he said, were netting him \$4 per bbl., and his seconds, which were better than any of the firsts in this locality, netted \$2 per bbl. Although a man nearly 75 years old, he was actively engaged in sorting and packing, and very few of his employees were able to keep pace with him. So particular has he always been in grading his fruit honestly, that commission men never question the grade which he marks his consignments.

He has always made it a point to economize ground, that all space should be occupied with a shrub, tree or plant, either for profit or beauty. Along the roadside he has a fine row of chestnut trees, which are quite full of fruit and make a pretty sight. In nearly every corner of his fences grows either a pear, peach, plum or cherry tree, and it was truly a grand sight to see a lot surrounded by a row of pear trees which were full of nearly ripe fruit. Another lot was surrounded by young peach trees not yet in bearing, which formed a strong contrast to the small fruit plants of the interior.

As a means of supplying fertility to his soil, he sows cowpeas to plow under late in the fall; where this plant had been turned under and incorporated in the soil it was showing greater results than our red clover.

This plant is so easy to grow, and it has so much more top and is as capable of storing nitrogen as the red clover, that many in the southern part of the State are depending more upon it than on the red clover.

Kalamazoo Co., Mich. B. A. WOOD.

For The Michigan Farmer.
CROPPING THE ORCHARD.

While taking a short trip through our county a few days since, I noticed a bearing orchard planted to corn, and I set the owner down at once as a man who does not attend our fruit institutes or horticultural meetings, or he would have known better and avoided the consequences. The corn was shaded and therefore looked spindling and sickly, and as we have had but little rain for the past few weeks, both corn and orchard showed the effect of cropping, and was a good object lesson to passers-by.

We are glad that such instances are rare, and that the majority of the fruit growers of Oceana county are intelligent men—men who are earnestly striving to learn and adopt all the best methods for successful fruit culture. Yet there are some who think there is no harm in cropping a young

orchard from one to two, three, and even four years, and the crop has little reference to the good of the tree.

Our most successful fruit growers say that after two years neither crop nor orchard will pay. The first one or two years the tree occupies but little space, and the ground may be planted without serious results; but it is advised to plant potatoes, melons, squashes or some similar crop that will not shade the trees. After three or four years the roots of the trees occupy fully twenty feet space, and no other crop should be allowed to occupy the ground.

One must know something of the roots, their manner of growth, etc., if he would cultivate successfully, yet different soils admit of different care. Careful study and observation are necessary to be successful in the orchard; and once in a while a good lesson is learned from experience. We had one such lesson, and that one was enough. It was in the earlier days of our fruit growing that, being short of ground to crop, oats were sown in the plum orchard. The trees blossomed full, promising a good crop. The plums hung on until mid-summer, when, having an extended spell of dry weather, they began in a short time to shrivel up and drop off. Those that did not drop off did not color up as usual, and, in fact, the crop was nearly a failure, while several of the trees died outright.

But, it taught us a lesson; no oats have been sown in the orchard since. There are some instances where young orchards are seeded down with the intention of plowing the crop under; but as the "catch" is good it is left until several crops of hay are removed, and the young trees are stunted almost beyond recovery.

Such fruit growing is a failure, and such fruit growers have the lesson to learn, that what is subtracted from the soil of an orchard will just so surely be deducted from the profits.

JENNIE M. WILLSON.

For The Michigan Farmer.
THE BERRY CROP.

The berry season is over, leaving the usual number of profitable lessons for next year. That is, in reality, about all it did leave the majority of growers, as the price was too low for much of a margin by the way of profit.

Last spring the outlook was good. The canes and vines did not seem to be seriously damaged by the winter and were soon covered with blossoms. Peaches were a failure and apples not much better, so it looked as though berries would be needed to supply the deficiency. But the result was disappointing. The price was low at the beginning, and it went still lower. People did not want fruit, even as cheap as it was.

What has been the trouble? Overproduction, says one, and another blames it to under-consumption, while between the two millstones the profits are ground to nothing. But whether there are too many berries grown, considering the market, or two few eaten for the supply, the result is the same, berries are not in demand.

The area devoted to berries has increased enormously during the past decade, but so has the demand. Instead of being a luxury they have almost become a necessity. Families who were once contented with a few quarts for the season now expect to have them every day, besides a good supply for canning, and a large part of the grocery bill consists of this one item of fruit, accompanied with a corresponding shrinkage in the amount allowed for other articles. Yet hundreds of people are now raising strawberries and raspberries for market who did not supply their own tables half a dozen years ago, and the inevitable result has followed. Thousands of bushels were left unpicked and thousands of more might better have shared the same fate, for they did not pay the cost of handling.

But is overproduction alone to be blamed? The area in bearing was probably considerably larger than last year, but the crop was not so good, according to reports, and this with the shortage in apples and peaches should have made the demand equal to or better than last season. It seems reasonable to lay part of the blame to under-consumption, though as to that there may be considerable difference of opinion.

One trouble was the low price at the beginning. When the first of the market is cheap people do not buy freely, but wait for the price to go

lower and of course it does. If the price is high at the start they are in a hurry to buy lest it go higher, and it frequently does so. In such a year as this the result is anything but pleasing to the producer.

Now what is to be done? Here is a chance for some one who has never been on a farm to come forward and tell us just what ought to be done, and how foolish we are for not doing what he tells us to. A student of political economy can supply a theory on short notice that will answer every purpose. He can divide a circle into parts, the first to represent those who grow the crop at a profit, the second those with whom the profit equals the cost, and the third those who raise the crop at a loss. Then he will tell us that those in the third class will stop growing this crop and turn the attention to other things. All this looks easy enough, only it does not take into consideration the perversity of human nature. The man who is raising a crop at a loss is too apt to consider that his neighbors will go out of the business because it does not pay, and so will cause a scarcity. Likely as not he will plant more acres than ever, and when he comes to market will find the prices still further reduced. Of course there are some who become discouraged and drop out, but there are so many who do the opposite that it needs several seasons of low prices to have much effect upon the market.

Then what shall we do? As for plowing up the berry fields which have cost considerable time and labor to get into bearing condition, we do not feel like doing that. Now that they have begun to bear, the most expensive period of their existence has been passed over. We might as well keep on and trust to finding some more satisfactory method of getting our fruit to market. Choice fruit is still in good demand, and the means for supplying it are not what they might be.

F. D. W.

For the Michigan Farmer.
ASPARAGUS FOR JULY AND AUGUST.

The following question is referred to me for an answer:

"I live near a summer resort which makes a good market for asparagus during July and August. How can I get tender shoots at that season?"

Answer: Do not cut any shoots in the spring, but let them come up and grow until your market is ready. Then mow the tops off close to the ground, and in a few days the new shoots will appear. Cut it only so long as it is very profitable, for it is very hard on the roots to be without a breathing apparatus and stomach (which are the leaves) at this season of the year. I know of no plant, not even the Canada thistle, which will stand as much cutting of the tops as asparagus, and yet it can be destroyed by that process.

The roots of asparagus are an immense affair, literally filling every part of the ground, and store up a great amount of digested food. New crowns will form and new shoots will continue to come up so long as the prepared food in the roots holds out, but it cannot digest any new food until it has leaves. During the summer the roots would only "manufacture" as fast as consumed, but in the late fall months the roots store up much more, as the tops always start in advance of root action, so that cutting in mid-summer for six or eight weeks would affect its vitality much more than in spring. The first cost of plantation is not so great as people imagine. If it proves sufficiently profitable in your locality a patch about three times as large as needed should be set so one part could be permitted to grow and recuperate while the balance was undergoing the cuttage. Some provision should be made for irrigation. At that season it is frequently very dry, and unless the ground is abundantly supplied with water, the "grass" will be woody, tough, and lack flavor. With plenty of moisture and mid-summer heat it would be very fine.

St. Joseph Co. R. M. KELLOGG.

In the State crop report for September the following remarks are made regarding our two principal fruit crops: "Apples and peaches are very light crops; neither will yield more than one-fifth to one-fourth of an average crop." Nothing is said regarding the grape crop, but from what we can learn it will be a fair one, probably fifteen to twenty per cent below last year's big crop, provided it meets no disaster until late varieties are matured.

CHICAGO IS NOT AESTHETIC.

The red tarlatan which imparted such a vivid coloring to baskets of sickly green looking peaches, must hereafter be discarded on peach packages intended for the Chicago market. The common council of that city last spring decided that tarlatan must go, so far as fruit packages are concerned, and passed an ordinance to that effect. Said ordinance also contains some important provisions regarding fruit packages, calling for packages of uniform size, and that all packages of peaches, apples, quinces, potatoes, pears, cherries, plums, beans, onions, peas, and all kinds of fruits and berries, except bananas and grapes, shall contain quarts, pecks, or bushels, and multiples thereof, and the amount contained in each package shall be distinctly marked thereon. Another section declares that all grapes which shall be sold in any basket, box, or any other package or parcel, shall be sold in pounds or multiples thereof, and that the quantity shall be marked on every package. This ordinance only refers to fruit and vegetables in packages, not in bulk. In the case of red tarlatan it is made unlawful to cover any box, basket, or any other package or parcel of fruit, berries, or vegetables of any kind with any colored netting or any other material which has a tendency to conceal the true color or quality of such goods. Any person who has purchased fruits or vegetables sold in violation of the provisions of the ordinance may produce his purchase at the health office with an affidavit showing that it has been purchased within twenty-four hours, and it will be the duty of the health officer to report the matter to the prosecuting attorney, who will see that the violator of the ordinance shall be punished. The penalty for the violation of any of the sections of the ordinance is not less than \$10, nor more than \$25 for each offense.

The regulation of fruit packages is something that should be done by every city for the protection of its citizens. The manufacturer has become an expert in making packages which promise much to the eye and give but a small percentage of the promise to the purchaser. And the more dishonest the package the greater sale it secures, for each grower wants to get all he can out of his crop. If he sends honest packages to market the dealer repacks the fruit into others and reaps the reward of his trickery. It is time the law stepped in and put an end to such dishonest practices, and protected the honest grower and consumer.

SPRING BLOOMING BULBS.

With the Autumn months come the preparations for bulb growing. The gardener and the grower of house plants must give attention to the selection of bulbs and placing them in their proper quarters. These spring-blooming bulbs are very tractable in some ways, but in others very exacting. Their management is not at all difficult, and yet it must be conducted within well defined lines.

Their wants are very much alike—whether tulip or hyacinth, or narcissus, crocus or snowdrop. The bulbs have rested during the summer months; while other kinds of vegetables have been active, these have been having a holiday vacation. It is their way; no amount of coaxing or persuasion or kind treatment will make them change their ways, and so we must give in and let them follow their nature. They believe in working with a will for nine months in the year and then going to sleep for three months. And now, here they are, all ready to begin operations if we will only set them to work.—Vicks Magazine for September.

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Extra fine stock of **CURRENTS**, including the new and unrivalled **WILDER**. Lowest rates. Quality extra. Warranted true. T. S. HUBBARD CO., Fredonia, S. D.

HARRISON'S
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PEACH TREES
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For the Michigan Farmer. BETTER WORK, BETTER FRUIT, BETTER PAY.

Last year we wrote an article for The Farmer warning against "broad acres" in small fruit growing, and insisting that intensive berry growing alone paid. The correctness of this view has been abundantly verified in the markets of Michigan during the past year. Probably not in the history of the State has small fruit sold so low as in the season of 1897. It was not entirely due to a large surplus. There were hundreds of the unemployed in every town, and money was unobtainable. Business of all kinds was stagnant, and everybody was practicing "pinchery" on all the needs of life. Scarcely a family among the "middle classes" who were not denying themselves luxuries which they had formerly enjoyed in abundance. The result of all this was that in many localities the markets were glutted when people were eating but very little fruit. I have a good deal of faith in the American people. If their financial system is not right, or any other wrong exists which prevents free exchange of commodities, they will very presently find out what it is and apply the remedy, and we shall soon enter upon an era of prosperity and enterprise the world never dreamed of, and the man who is ready will reap a rich harvest; but your ambition must be turned in another direction.

Hitherto the trend of berry growers has gone to "broad acres." As a rule, growers have set three or four acres when one acre would have paid them much better. They did not have manure or labor at their command to fertilize and properly cultivate scarce a quarter of their plantings. If they had concentrated their efforts they would have had twice as much fruit to the acre of a grade that would not only have brought much more money, but would have set people to eating and creating a market despite the hard times.

You should now begin to do the planning for next year. Look over the ground carefully and reduce the acreage to a point where you can give plenty of manure, and the most thorough culture next season. This must include runner cutting, mulching, and all the details of the season's work.

Few of our growers have any conception of the possibilities of strawberry growing under intensive cultivation. A trial under high pressure will convince you there is more fun, money and pleasure in one acre under this plan than five acres under the "extensive" system.

R. M. KELLOGG.

SPECIAL SALE.

We are in receipt of price list of "special sale" of fruit trees from Cal's Nurseries, Perry, O. For the sake of encouraging fall setting of fruit trees and at the same time reducing the large stock of extra fine trees now on hand, Mr. Cal is making this "special sale" at prices so low that our readers will find it a rare chance to secure the best of stock at prices that are low enough to please everybody. Write them for price list of Special Sale.

Legal Department.

CONDUCTED BY EARL D. BABST,
56 Moffat Building, Detroit.

MICHIGAN GAME LAWS.—I.

Section 1. The People of the State of Michigan enact, That no person or persons shall injure, pursue, hunt or kill, or attempt to kill, capture or attempt to capture by any means whatever, any deer or elk in the island of Bois Blanc, in Lake Huron, until the tenth day of November, eighteen hundred and ninety-nine, or in the Counties of Alcona, Lapeer, Huron, Sanilac, Tuscola, Macomb, Allegan, Ottawa and St. Clair, until the first day of January, nineteen hundred and three, and thereafter only at the time, in the manner, and for a purpose authorized by law.

Sec. 2. No person shall kill more than five deer in any one year, and they shall only be killed at the time, in the manner, and for the purpose authorized by law.

Sec. 3. No person or persons shall pursue, hunt, kill or attempt to kill, capture or attempt to capture any deer in this State, save only from the eighth day of November to the thirtieth of November, both inclusive, in each year.

Sec. 4. No person or persons shall

pursue, hunt, or kill, capture or attempt to capture at any time, any deer when it is in the red coat or any fawn when it is in the spotted coat, or have in possession the skin of such deer or fawn in the red or spotted coat, and the having in possession the skin of such deer or fawn shall be prima facie evidence of illegal killing.

Sec. 5. No person or persons shall at any time, wound, kill or capture any deer in the waters of any of the streams, ponds or lakes within the jurisdiction of this State.

Sec. 6. No person or persons shall injure, wound, capture or kill any deer by means of any pit, pit-fall, dead-fall, trap, scaffold, snare, net or any similar device, or by the use of any chemicals, poisons or explosives.

Sec. 7. No person or persons shall make use of any artificial light in hunting or killing deer, and the wearing or having such light on the head, shall be prima facie evidence of violation of this section.

Sec. 8. No person or persons shall make use of a dog or dogs in hunting, pursuing or killing deer. The presence of a hound or hounds in woods, hunting and logging camp or club house during the hunting season shall be prima facie evidence of their unlawful use.

Sec. 9. Any dog pursuing, killing or following upon the track of a deer, is hereby declared to be a public nuisance and may be killed by any person when so seen without criminal or civil liability.

Sec. 10. No person or persons shall injure, kill or destroy, by any means whatever, any wild fox squirrel (American squirrel), black squirrel or gray squirrel, save only from the first day of October to the thirty-first day of December, both inclusive, in each year.

Sec. 11. No person or persons shall make use of ferrets in pursuing, capturing or killing fox squirrel, black squirrel or gray squirrel at any time.

Sec. 12. No person or persons shall injure, kill or destroy any wild turkey by any means whatever until the year nineteen hundred and five, and then save only from the first day of November to the thirtieth day of November, both inclusive, in each year.

Sec. 13. No person or persons shall injure, kill or destroy by any means whatever any ruffed grouse, sometimes called partridge or pheasant, or colin or quail, sometimes called prairie pheasant, or any spruce hen, save only from the first day of October to the first day of December, both inclusive, in each year: Provided, That in the upper peninsula, partridge may be killed from September fifteenth to November fifteenth, inclusive, in each year.

Sec. 14. No person or persons shall injure, kill or destroy, by any means whatever, any kind of wild duck, wild goose, brant, or other wild water fowl, save only from the first day of September to the thirty-first day of January, both inclusive, and then only from one-half hour before sunrise until one and one-half hour after sunset each day: Provided, That in the upper peninsula any kind of wild duck, wild goose, brant or any other wild water fowl may be killed from September first to January fifteenth, inclusive, for each year. That it shall be unlawful to injure, kill or destroy any wild pigeon until the year nineteen hundred and five, and then only from October first to December thirty-first of each year, or any kind of snipe, woodcock, plover, save only from the first day of October to the first day of December, both inclusive, in each year.

Sec. 15. No person or persons shall at any time make use of any swivel or punt gun or make use of any battery or mine, floating or stationary, or any similar contrivance, or any pneumatic boat, for the purpose of killing any wild duck, wild goose, brant or other wild water fowl.

Sec. 16. No person or persons shall at any time make use of any pit, pit-fall, dead-fall, cage, snare, trap, net, or any similar device, or any baited hook or line, or any drug, chemical or explosive for the purpose of injuring, killing or destroying any wild turkey, ruffed grouse, partridge, quail, colin, woodcock, snipe, plover, mourning dove or wild pigeon, spruce hen or any wild duck, wild goose, brant or other wild water fowl, or any other bird the killing of which is at any time or at all times prohibited by law: Provided, That cages, snares, traps or nets may be used to capture quail alive, for the purpose of keeping them alive through the winter, but for no other purpose whatever. Quail so taken must not be transported outside of this State to

other places, but must be again liberated when the weather is suitable in the spring.

Sec. 17. No person or persons shall at any time or in any manner whatever injure or destroy or rob the nest, or take, injure, destroy or have in possession the eggs of any bird, the killing of which is at any time or at all times prohibited by law, nor shall any person or persons at any time or in any manner whatever, molest, harass or annoy such birds while on their nesting places.

Sec. 18. No person or persons shall molest, harass, or annoy, or break, train or practice any dog upon any of the game birds or animals referred to in this act during the closed season.

Sec. 19. No person or persons shall in any manner whatever or at any time injure, capture, kill or destroy any wild pigeon or pigeons at or within five miles of the place or places where they are gathered in bodies for the purpose of brooding their young, sometimes spoken of as their nestings or rookeries, or within five miles of their roostings, and then only with gun, and not until after the year nineteen hundred and five.

Sec. 20. No person or persons shall at any time or in any manner whatever injure, kill or destroy, or attempt to injure, kill or destroy, any robin, night hawk, whip-poor-will, finch, thrush, lark, swallow, yellow bird, blue bird, brown thrasher, cat bird, wren, martin, oriole, sea gull, woodpecker, bobolink, or any song bird or insectivorous bird excepting black bird, blue

jay, English sparrow and butcher bird. Sec. 21. The term "game bird" used in this act shall be construed to mean all birds named or referred to, except those mentioned and referred to in section twenty.

Sec. 22. No person or persons shall have in possession the dead body, or carcass, or skin, or any portion thereof of any animal or bird mentioned or referred to in this act during the time when the killing of such animal or bird is unlawful except as authorized by law.

Sec. 23. It shall be unlawful for any person or persons to have in possession the dead body or carcass, or any portion thereof, of any animal or game bird mentioned or referred to in this act for sale longer than five days immediately following the end of the time in each year when by the provisions of this act the same may be lawfully killed: Provided, however, It shall be lawful for any person or persons, at any time, to have in possession the dead body or carcass, or skin, or any portion thereof of any animal or bird mentioned or referred to in this act for scientific purposes, or as specimens or for his own consumption.

The governor of Cape Colony, South Africa, has issued a proclamation prohibiting the importation of "any stone fruit tree or any fruit scion, cutting, graft, root or seed, the growth or produce thereof, from the United States of America or the Dominion of Canada."

A Vain Search.

Several Years and Thousands of Dollars Expended.

An Expert Accountant and Bookkeeper of Detroit Troubled with Hereditary Scrofula in its Worst Form—Spends a Small Fortune Seeking to Find a Cure.

From the Evening News, Detroit, Mich.

James H. Wallace, the well known expert accountant and bookkeeper, of Detroit, Mich., lately had a remarkable experience, and a reporter called at his pretty home 210 Sixth street, to interview him regarding it. He found Mrs. Wallace in the midst of house cleaning, and after the reporter stated the object of his visit Mrs. Wallace said: "You had better see Mr. Wallace at the office of C. A. Haberkorn & Co., table manufactory on Orchard street, and he will tell you of this experience much better than I." A visit was made to the office of the above concern where Mr. Wallace was seen. "I am," said Mr. Wallace, "yet a young man, still I have suffered untold agonies and tortures. I was born with that awful hereditary disease known as scrofula, and what I suffered cannot be well described.

"The first physician that treated me said it was a constitutional blood disorder and by constant treatment and diet it might be cured. The blood purifiers and spring remedies I used only made the eruptions more aggressive and painful. In 1888 I was a fearful looking sight and was in fact repulsive. On my limbs were large ulcers which were very painful, and from which there was a continual discharge. In three years I spent over \$3,000 in medicine and medical services and grew worse instead of better. I tried the medical baths, and in 1893 went to Medicine Lake, Washington, but was not benefited. I then tried some proprietary medicine, but did not receive any benefit.

"One day in the fall of 1895, while reading the paper I noticed an article about Dr. Williams' Pink Pills for Pale People, but did not give it much attention. That afternoon while moving some books broke an ulcer on my leg and nearly fainted, the pain made me sick and I had to

stop work. While sitting in the chair I again noticed the Dr. Williams' Pink Pills article in the newspaper which was laying on the floor. I read it carefully and immediately decided to give the pills a trial, as the account which I read had been a case similar to mine. I sent the office boy over to Frank Hou's drug store for a box and took some that afternoon. I continued their use and before I had used one box I noticed an improvement. I grew better rapidly and all my friends noticed the improvement, and after taking eight boxes there was not a sore on my person.

"I am covered with scars from the ulcers but since that time I have not seen a single indication of the old trouble. I continued the use of the pills long after I was cured as I wanted to get my system rid of that awful disease.

"If I only had bought Dr. Williams' Pink Pills at the start I would be thousands of dollars ahead and had five years of health and happiness instead of torture. To-day I feel like a perfect man and my doctor says I am entirely rid of my old trouble."

(Signed) JAMES H. WALLACE.

Detroit, Mich., May 7, 1897.

Before me a Notary Public in and for Wayne County, Michigan, personally appeared James H. Wallace, who being duly sworn, deposed and said that he had read the foregoing statement and that the same was true.

ROBERT E. HULL, JR.,
Notary Public.

Wayne County, Mich.
Dr. Williams' Pink Pills for Pale People are sold by all dealers, or will be sent post paid on receipt of price, 50 cents a box or six boxes for \$2.50 (they are never sold in bulk or by the 100), by addressing Dr. Williams' Medicine Co., Schenectady, N. Y.



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* 4:50 pm	St. Clair, Romeo and Pt. Huron	* 6:10 pm
* 10:35 pm	Buffalo, Toronto and New York	* 6:45 pm
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Farmers' Clubs.

CONDUCTED BY A. C. BIRD.

All correspondence for this department should be addressed to A. C. Bird, Highland, Mich.

OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

President—J. T. Daniels, Union Home.
Vice-President—Patrick Hankard, Henrietta.
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All communications relating to the organization of new Clubs should be addressed to F. D. Wells, Rochester, Mich.

THE PRACTICAL IN EDUCATION.

We venture the prediction that ere the lapse of another decade the popular educational ideal will have been revolutionized. The great mass of practical people are for the first time thinking along these lines, and when the practical people once give their attention to a matter so important they are never slow to act. The educationists of the old school have long traveled their peaceful, non-progressive paths, untrammelled by new ideas. They have maintained the even tenor of their way because of the mild form of superstitious reverence on the part of a too trustful people. Only occasionally, here and there, have they been embarrassed by the troublesome questions of some non-professional heretic who has ventured to think his own thoughts and express his own ideas along educational lines. But of late these troublesome questioners have rapidly become numerous. Their demands for practical results from the schools have attracted favorable attention from thoughtful people everywhere. There seems to be a general awakening to the fact that the higher education of the old school is largely devoid of practical results.

This new idea is already so firmly grounded that nearly every State in the Union has several excellent examples of educational institutions wherein the students are taught to live as well as to think. Where they are taught that manual labor is wholesome, and that a trained mind is best employed when directing a trained hand. The manual training school is comparatively new, but it is rapidly gaining in public favor and is strictly in line with the new educational idea. The Agricultural College was of earlier birth, but it seemingly came before its time, and much pioneer ground yet remains to be broken before the true ideal will have been realized. Schools of mechanic arts have been more successful for the reason that the problem was infinitely more simple. Domestic science for young women is the most recent development of the new idea, and its popularity as well as its practicability is already thoroughly demonstrated.

When it is remembered that the new idea is but in its infancy, and that it has been compelled to fight for every inch of ground it has gained in open battle against the ever jealous defenders of the old system with the centuries of prestige at their backs, the results already accomplished are truly wonderful.

But let us not be too enthusiastic. As with all new radical departures from old established precedents, many mistakes are certain to be made and much just criticism will be inevitable. Of one thing, however, we may be certain; that the tide of popularity has turned decisively and permanently toward the practical, and that in spite of the mistakes which are sure to be made and the criticisms which must be endured, the young men and women of the future will be educated under a radically different system from those of the past. A system that will attract the business man and the farmer, the tradesman and the mechanic.

APROPOS OF THE FOREGOING.

That recruits to the new educational idea are coming, even from the disciples of the old school, gives an added emphasis to the above. In "Scribner's" for August, Helen Moodye Waterson, herself a product of the old education, in an article on "The Woman Collegian," gives expression to the following:

"Since it is devoutly hoped and expected that the greater part of our college girls will not be educated out of the good old fashion of marrying and taking up thereafter the profession of housewifery, it would appear to be as practicable and sensible to educate a girl with some reference to the special and particular knowledge she will need in her life's work as it is to put a boy into the school of mines to make him a civil engineer, or into a laboratory to make a chemist of him.

"I know the argument to the contrary; I used to write about it myself, and believe it too; but that was before the serious days settled down upon me, when I would have gladly exchanged my small birthright of Latin and Greek for the ability to make one single, respectable mess of anything half so good as pottage. The argument is of course, that, given a certain amount of intellectual discipline and general training, the young woman will absorb easily enough such special facts as she needs when the time of their usefulness comes. But facts, you see, are apt to be solid things; you can not absorb them; you must work them over into something else first—to change the figure, you must masticate them, and digest them, and make them a very part of your bone and tissue before they can be of much service to you. And this is not to be done when a sudden emergency arises. One needs something more than facts; one needs that last product known as a knowledge of facts, in the profession of the housewife and in the presence of the cook.

"After graduation nineteen out of twenty young women at once take up some means of earning a livelihood. There is nothing to be regretted, the writer thinks, in this fact; the twentieth girl is the one to be pitied. The most notable work undertaken by college women in their thirty years of opportunity is one which is still in its infancy, but which, when developed, is likely to do more for that emancipation for which believers sigh than all the legislation of men and all the oratory of women. In the chemistry of foods, the science of nutrition, the sanitation of the house, the economics of the home, their work has been both original and thoroughly scientific."

"ONE HUNDRED NEW CLUBS BEFORE APRIL 1!"

From many sources we are receiving encouraging letters regarding the prospects for new Clubs. The Club workers throughout the State seem to have adopted the working motto suggested in this department several weeks ago and again appearing above. President Daniels' work is an inspiration to all who come within its influence, and Secretary Wells each week is writing the department of new accessions to our ranks. With the hundreds of other enthusiastic workers scattered all over the State we are strongly inclined to change the number in the motto from one hundred to two hundred. Let the good work go on. Last year's work seemed to us unapproachable in results, but this year's will surely leave it far behind.

A Successful Nursery's Growth.

A long story of enterprise and business success is condensed in the brief statement of the Harrison Nurseries at Berlin, Md. In 1888 they grew two thousand five hundred plants, in 1896 two million and a half, in 1897 ten million. But the beginning of these extensive nurseries was with peach trees, and of these there were more than a million budded during the present year. The specialty in this line is the Fitzgerald peach, a yellow fruit of the finest quality, ripening with the Crawford, and a sure bearer. Columbian White and Donald's Elмира asparagus roots are recent productions of rare merit which have been added to the list of more ordinary varieties. Other specialties are Japan Plums and Miller Red Raspberries, in growing both of which the Harrison Nurseries have become notably successful. Descriptions of new fruits and small fruits, and their general catalogue, is sent free upon application.

SANDSTONE AND BLACKMAN FARMERS' CLUB—WORK AND METHODS.

In accordance with the request of the Michigan Farmer, I will endeavor to give a short description of the methods employed in conducting our club, which has a membership of more than one hundred. Meetings are held the third Saturday of each month. This day of the week is selected to accommodate teachers and students. It is the duty of the executive committee, consisting of three members elected at the annual election of officers, to announce the place of meeting. This is determined by invitation of members. At about ten o'clock in the morning the host and hostess may expect members to arrive. They come from every direction for miles around, and by noon the yard is well filled with carriages and the house with visitors. Each family provide themselves with folding table, cloth napkins and dishes, enough for themselves and an extra one or two. The baskets containing both dishes and refreshments are carried to the kitchen and the eatables removed. Then the members of the refreshments committee, who have at the previous meeting reported a list of refreshments to each lady, take charge of the eatables, cutting cake, etc., and arranging everything ready for the waiters to serve. Coffee, tea or lemonade is prepared, and cream is furnished by the hostess. While the committee and their assistants have been thus engaged the other visitors have not been idle. The small tables have been set up, covered with the cloths, and the dishes placed on each. Before this time the president has called the meeting to order, the opening song has been sung, and the chaplain has conducted the short religious exercise.

Then the call comes to be seated. All sit with bowed heads while the chaplain says grace; and then the dinner is served under the direction of the refreshments committee by all the younger members of the club. They pass from table to table with each delicacy, and to judge from the gay talk and laughter this is not the least delightful portion of the day's work. When all have been fed the merry waiters provide themselves with plates heaped with good things and eat their fill. Then all the dishes are packed back in the baskets, the tables folded up and then everyone is ready to listen to the program.

The club never lacks for places of meeting because it is not a great task to entertain. As little work is made the hostess as possible, since she has no tables to prepare, few if any dishes to furnish, no refreshments to look out for. Nor is the host troubled especially except to furnish hay for horses and stable room in cold or rainy weather.

After dinner is over the crowd is increased by late arrivals, until most houses are well filled. The exercises begin with singing by the club under the direction of the chorister. When a piano or organ may be used the organist assists by furnishing accompaniments for singing.

The order of business is as follows: application for membership, voting on applications, unfinished business, new business, report of committees, literary program, question box, any other business, as buying, selling or exchanging. The finances of the club are sustained by the ten cents exacted as admission fee from new members. No other dues are required, except special assessments. During the life of the club, now in its second year, but one assessment, of five cents per member, has been levied.

The literary program is prepared by a committee of three who are appointed for a period of six months. At each meeting the report is made for the next meeting. The program includes vocal and instrumental music, recitations, select readings, a paper on the current events of the past month, and the question sent out by the State Association. One or more speakers are appointed to open the question and after these have spoken the discussion becomes general. Occasionally a second question is discussed. It is to be regretted that these discussions, often very interesting, are usually conducted by only a small proportion of the members. However, much improvement has been noticed in this direction. At some meetings the announcement is made that each member will be called to offer some thought on the topic, and thus people are led to respond who otherwise would not feel that

they were able to speak before so large a company.

During the latter part of the literary program the youngest members of the club usually retire to the yard or another part of the house and enjoy a visit by themselves.

The question box is taken up if there is time for it. The adjournment occurs promptly at 4 o'clock.

F. E. DANIELS, Cor. Sec'y.

REPORTS FROM LOCAL CLUBS.

PINE RIVER FARMERS' CLUB.

The Pine River Farmers' Club met at the home of Mr. and Mrs. Davenport, on September 2. After the opening exercises the question of sending delegates to the county organization was reported favorably.

The following questions were then asked and answered:

What is the cause of the advanced price of farm products? Answer—Foreign demand; confidence; a protective tariff.

Is a man's surroundings an index to his character? Answer—Yes, you can fairly judge a man's character by the looks of his place.

In what is there the most money for the farmer? Answer—In anything you go at if you go at it with a determination to succeed.

After dinner a paper was read by A. C. Henry, on "The Value of the Toad to the Farmer." It is one of the greatest destroyers of pests of the insect order. Eighty per cent of its food is of this nature.

Mr. Ellis Clark next read a selection on "Temperance." A natural diet never causes disease. We eat too many times a day. Should never eat just before going to bed. A dyspeptic should never eat more than two meals a day.

O. E. Mey read a selection on "Farming." He contrasted very nicely the old method with the ideal method of farming.

Mrs. A. C. Henry next read a paper on "Order." We should commence training our children to be good husbands and wives when they are young, by having a place for everything.

"Seed Breeding" was next presented by John Henry. He showed how important it is to have seed from good plants if we wish to produce good crops. We must have an ideal plant which we are aiming to produce.

Should farmers take a vacation? Answer—Yes.

The Club adjourned to meet with Mr. and Mrs. H. White, in October. Gratiot County. COR. SEC'Y.

MILFORD FARMERS' CLUB.

The September meeting of the Milford Farmers' Club was held at the home of Mr. and Mrs. Levi Crawford, on Wednesday last. The unfavorable weather prevented many who were assigned places on the program from attending. This shortened the exercises and most of the day was spent in a social way.

The usual opening exercises were followed by a recitation by Mrs. B. B. Power and a select reading by Mrs. George Gordon. Among the queries in the box was "Why does it rain every Club day?" This question still echoes "Why?" Miss Florence Crawford read a paper on the local question, "Resolved, that a lawn mower and poultry yard will give more enjoyment to the farmer's wife than a horse and carriage." Mrs. S. McCall led in the discussion and the prevailing opinion was very decidedly in favor of the horse and carriage.

Mr. Vincent gave the plan of the farmers' institute workers for the coming year, which is to use the additional appropriation made by the last legislature in holding about one hundred one-day institutes throughout the State, and if arrangements can be made Oakland county will be entitled to five of these meetings. From the fact that the one held here last winter was a success in every respect, both in attendance and results obtained, together with the enthusiasm now manifested by the members prompts the Milford Farmers' Club to extend an invitation to the Oakland County Farmers' Institute Society to hold a oneday institute at Milford.

The Club adjourned to meet at the residence of Mr. and Mrs. B. B. Power, October 6.

Oakland Co. W. D. ALLEN, Cor. Sec. SOUTH WEST VERNON FARMERS' CLUB. Southwest Vernon Farmers' Club met with Mr. and Mrs. N. J. Strong on the afternoon of Sept. 2nd. The meeting was called to order by the president. After the usual order of exercises, roll was called to which all

responded with the exception of three families.

Mrs. Nelson West gave a few brief remarks on the question, "To what extent should farmers' wives follow the fashion?" She quoted the old saying, "better be out of the world than be out of fashion." Her opinion was that we might better be out of fashion and pay as we go than be in fashion and owe. The absence of pockets in ladies' dresses was quite freely discussed by the gentlemen.

The leading question of the day, "Does it pay for the farmer to keep thoroughbred stock?" was taken up by W. G. Smedley, and a discussion followed by others. Mr. Clark said for an all-purpose cow a good grade was better than a thoroughbred.

One member said it did not cost any more to keep a good high grade cow than a poor one, but, while this was admitted, still several thought the farmer realized as much in market from a good grade as from a thoroughbred cow. The opinion, however, prevailed that it did not pay for the average small farmer to keep a line of thoroughbred stock.

The question box was conducted by D. Williams, and brought forth some very profitable and interesting remarks.

The best time to sow wheat was thought by some to be from September 10th to 15th. Others thought the time to sow was when the ground was fitted and in readiness. The experience of some was that insects injured the late as well as early sown wheat.

The question was asked, "How can we remove worms from cabbage?" Some said to pour on hot water. Others, that they had been successful by putting on dirt from the road.

Quite a lively discussion ensued over the question, "Does the Agricultural College make a practical farmer of a man or is experience the best teacher?" Some thought that a man would be shown and taught things at the College that would take a lifetime for him to study out. Nearly all voiced the sentiment that if a man has ambition, a disposition, and a taste for farming, his success as a farmer is insured.

The question of fall sowing of clover seed was also asked. All those who had tried it said they met with poor success, as it did not get growth enough to winter safely.

The club requested the president to appoint a different committee to take charge of the program for each meeting.

After the usual closing exercises the company was entertained with music by Dr. and Mrs. Holtzman, Dewey and Claud Bryant.

By invitation the club meets with Mr. and Mrs. A. Harrington, October 7th.

Shlawassee Co. REPORTER.
WHITE LAKE FARMERS' CLUB.

Perhaps sixty people were present at the September meeting of the club held on September 4th, at the home of James Neal. After dinner the program was opened by a discussion of the Association question, "The Organization of New Clubs; How Best Can Their Number be Increased?"

E. P. Flower spoke of the importance of organization. Farmers are the most poorly organized of all occupations. Manufacturers get what legislation they wish because they are organized. Farmers' clubs were very effective in pushing the bill for the coloring of substitutes for butter. Much more would be done if the whole State were organized. Besides the club had been very beneficial in a literary and social way. Therefore we should pass along these blessings.

W. E. Clark had been asked by friends in the western part of his township about the advantages of a club and how to organize one. He had promised to help them whenever they should be ready.

J. Jackson said that much could be accomplished by bringing to the club meetings people from districts where it was desirable to organize clubs. They would thus get an object lesson on the value of such an organization.

"How Shall We Make Farm Life More Enjoyable and Attractive?" was the next subject taken up. Mrs. M. Voorhels said that farmers drudged too much. They rise too early. They work too late and take too little time for recreation. Our finances would not be greatly affected if we put in shorter hours.

Mrs. N. Clark emphasized the same points. She thought that farmers enjoyed themselves better in her youth,

when play spells were more frequent. Now-a-days people work upon the Fourth of July. A good supply of dry wood, meals ready on time and eaten on time were other good aids in her opinion.

E. P. Flower said that no one should go without a good supply of ice and a well-stocked vegetable garden.

M. Voorhels stretched his imagination, and by way of contrast drew a vivid and startling picture of a most unattractive farm home.

E. P. Flower being called upon, gave a very glowing description of his recent trip to Mackinac upon the Michigan Farmer excursion. He became enthusiastic and predicted a much larger excursion next year. He urged every farmer to take advantage of such an opportunity if it should occur again.

The meeting closed with a question box. The most of the questions pertained to the sowing of wheat. Those who would sow from the 5th to the 12th of September were in the majority, rather than the advocates of late sowing. The club adjourned to meet the first Saturday in October at the home of Andrew Doty.

Oakland Co. REPORTER.

HOWELL FARMERS' CLUB.

The regular monthly meeting of the Howell Farmers' Club was held at the home of Mr. and Mrs. E. E. Latson, on September 2d. Considering the busy time the attendance was large, and the enthusiasm which has characterized our former meetings was by no means decreased. Since the organization of our club our membership has steadily increased and at this meeting it reached one hundred.

At the conclusion of the opening exercises the literary program was listened to, all of which was very good.

Miss Ella Staley's selection, "The Bread Winners of the Nation," deserves especial notice, because it was so appropriate for the occasion. The article emphasized the fact that agriculture was the foundation of the social structure, and advocated the resistance of all legislation that in any way crippled the agricultural interests of the country.

The Association question was the next object of attention, "The organization of new clubs; how best can their number be increased?"

Mr. Staley led in this discussion. He was very zealous in advocating the necessity of the organization of the farmers. He said it ought to have been done before. Agitate the question and organize, then. In the future we will not be gulled as we have in the past.

Mr. House said, make the meetings of the club so interesting that the people desire to come.

Mr. Hildebrand spoke rather discouragingly. The farmers are the most difficult class to organize, because of their large numbers and varied circumstances.

Mr. Smith said he did not like these doubting Thomases. He was highly in favor of such organizations. Make a success of the clubs that are now organized. Let each member study the club's constitution, especially the preamble, and see what is the object of our organization. Then study these principles and agitate them.

Mr. Latson said, agitate the subject. We could make a success of the club by each member being interested in the matter.

The contents of the question box were next considered. The box contained a variety of questions. The most important were, "What are the best wheats to sow this fall; and how early should they be sown?"

Mr. Staley favored Dawson's Golden Chaff, also Red and White Clawson. Time to sow from the 10th to the 20th of September.

Mr. Hildebrand said different wheats for different localities. Time to sow not earlier than the 10th this year.

Mr. McKane favored the Nigger wheat. He had raised both White and Red Clawson.

Mr. Barron said, wheat that will do well in some soils would not do as well on other soils. Red Clawson is his choice, although he thought favorably of the Nigger wheat.

Mr. Latson favored the Nigger wheat with one exception, and that was the smut.

"What would you do to prevent the potato scab?" Bordeaux mixture was recommended. Also a solution of sulphate of zinc.

"What is the best remedy for caked

udder in cows?" Bathe in cold water, or in a solution of water, soft soap and spirits of turpentine. It was also suggested that "an ounce of prevention is worth a pound of cure." Be careful of the feed.

"Are the terms 'price' and 'value' synonymous terms?" This question was assigned to Mr. Staley. He desired to pass it on, but the rules of the club were enforced, and he is expected to answer it at the October meeting. Mr. Hildebrand being one of the members of our club that enjoyed the recent excursion to the Agricultural College, he was asked, "What impressed him most at the farm?" Replying, he said: The cultivation of Canada thistles and burdocks.

"Why are not farmers called business men?" This was assigned to R. R. Smith. Replying, he said: One reason is the scarcity of gray matter in the head of those entertaining the opinion that farming is not a business. And second, the failure of the farmers in the past to organize and demand recognition in legislation as other business men did. The speaker emphatically declared that the farmer is a business man, and heartily endorsed the statement made by W. J. Bryan, in his famous Chicago speech, wherein he said, "The farmer who goes forth in the morning and toils all day—who begins in the spring and toils all summer—and who by the application of brain and muscle to the natural resources of the country creates wealth, is as much a business man as the man who goes upon the board of trade and bets upon the price of grain."

In the best of spirits the club adjourned to meet at the residence of David Robinson on October 7th.

Livingston Co. MRS. R. R. SMITH, Cor. Sec.
NORTH SHADE FARMERS' CLUB.

The meeting for September was held at the pleasant home of E. M. Norton. Although the attendance was not quite as large as usual yet there was a goodly number present.

In the absence of the president, John T. Swigart was called to the chair. After the usual opening exercises the State question was discussed: "How can we extend our local club movement?"

J. Sessions was called for and gave a few pointed remarks. He said if we are to succeed we must take an interest in it. In order to carry on the work somebody has to make a sacrifice. It needs somebody to go ahead. Farmers would not lose anything if they would spend time to attend such meetings.

A. S. Bemis said all other classes of men have their organizations, the bankers, the merchants, the ministers, and the farmers should take the lead.

Mrs. A. S. Bemis said if they wanted to extend the work, they should send missionaries over into Bloomer township. Some thought a committee should be appointed to organize new clubs. The steps necessary to organize new clubs were called for, and answers given by the members.

J. Sessions then talked on wheat culture. His opinion was that it did not pay to go too extensively into wheat. A rotation of crops should be followed. Sowing wheat on oat stubble is more profitable than on fallow ground. The ground should be plowed as soon as the oats are off, rolled, then harrowed to prevent the escape of moisture through capillary attraction.

Mr. Franklin thought it depended on the soil what kind of wheat to sow. Dawson's Golden Chaff, Nigger and Clawson were highly recommended.

Mrs. Emma Davenport read an original and interesting poem.

Some miscellaneous business was transacted and the session closed. The matter of co-operating with the other clubs of the county in organizing a county association was left with the executive committee.

All-day meetings seem to be better attended than those held in the afternoon. Probably the bountiful dinner is one of the attractive features.

The next meeting will be held the first Thursday in October at John H. Clark's, commencing in the morning.

CLYDE AND GRANT FARMERS' CLUB.
COR. SEC'Y.

The August session of the Clyde and Grant Farmers' Club met at the home of Mr. and Mrs. Malcolm Patrick, in Clyde, on the 26th and was well attended by members and visitors. Order of business called at 2:30 o'clock by President David Beard. A program was rendered consisting of recitations by Miss Flora Beard, readings and music by Misses Glass and Rob-

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AN OPEN LETTER

From Miss Sachner, of Columbus, O., to Ailing Women.

To all women who are ill:—It affords me great pleasure to tell you of the benefit I have derived from taking Lydia E. Pinkham's Vegetable Compound. I can hardly find words to express my gratitude for the boon given to suffering women in that excellent remedy. Before taking the Compound

I was thin, sallow, and nervous. I was troubled with leucorrhœa, and my menstrual periods were very irregular.

I tried three physicians and gradually grew worse. About a year ago I was advised by a friend to try Mrs. Pinkham's Sanative Wash and Vegetable Compound, which I did. After using three bottles of the Vegetable Compound and one package of Sanative Wash, I am now enjoying better health than I ever did, and attribute the same to your wonderful remedies. I cannot find words to express what a Godsend they have been to me.

Whenever I begin to feel nervous and ill, I know I have a never-failing physician at hand. It would afford me pleasure to know that my words had directed some suffering sister to health and strength through those most excellent remedies.—MISS MAY SACHNER, 348½ E. Rich St., Columbus, O.



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erts, blind violinists, students and representatives of our State School for the Blind. Some fine original compositions were given.

A. Kingsley read articles from the Metropolitan and Rural Home, "Farmers to Organize," which were endorsed by Wm. O'Dett, Joseph Gibbons, and others.

Mr. Gibbons thinks the farmer is largely to blame for the unfavorable condition under which he is laboring to-day. He is too indifferent to the work of the legislature.

Henry Kingsley considers our State constitution inadequate to the wants of the people and strongly advocates revision and reconstruction.

Mr. O'Dett thinks it a mistake to send lawyers to represent the interests of the farmer in legislation.

Mr. Glass gave an interesting address on "Unity as a factor of success."

B. D. Smith exhibited a sample of Dawson's Golden Chaff wheat, a limited supply of which he offers for sale. He produced his seed from the Agricultural College farm.

Resolutions on the death of Wm. Dagg, a highly respected member of our club, were presented and adopted.

Henry Kingsley learned by accidental experiment that a heavy application of wood ashes upon clay soil will produce fine radishes. Another member recommended sulphur sown with the seed.

Mr. Patrick presented an infallible method of exterminating Canada thistles. Cut them when the zodiacal sign is in the heart.

The September meeting will be held on the last Wednesday in the month at the residence of Mr. Henry Kingsley and will be a harvest home meeting. A good exhibition of farm produce will be expected, and arrangements will be made for a good display of the same.

MRS. O. McKAY, Cor. Sec.
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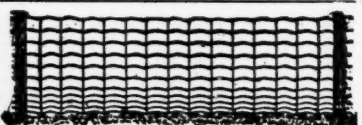
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